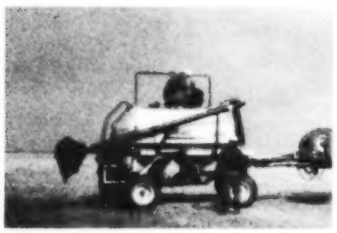
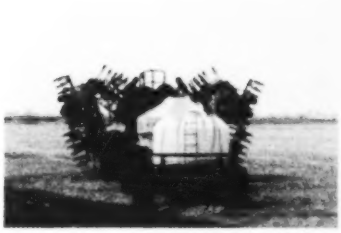
Saskatchewan
Agriculture
and Food

Farm Machinery
Custom and Rental Rate Guide 2006-07





106-06972/

Farm Machinery Custom and Rental Rate Guide 2006-07

Table of Contents

Page

Introduction i
Explanation of Custom Rate Guide Tables ii
Classification of Air Drills, Air Seeders and Zero Till Drills iv
How to Use the Custom and Rental Rate Guide v
Summary of Average Calculated Custom Rates v
2006 Average Calculated Custom Rates vi

Powered Equipment
Bale Wagons, Self-Propelled 1
Combines, Self-Propelled Conventional 1
Combines, Self-Propelled Rotary 1

Combine Attachments – Headers
Pickup Headers 2
Rigid Headers with Batt Reels 2
Flex Headers with Pickup Reels 3
Draper Style Headers with Pickup Reels 3

Powered Equipment
Grain Augers with Motor 4
Sprayers, High Clearance 4
Swathers, Self-Propelled 4
Tractors, 2 Wheel Drive 5
Tractors, 4 Wheel Drive 6
Trucks, Grain 7
Trucks, Pickup 7

Drawn Equipment - Grain
Air Disk Drills 8
Air Hoe Drills 8
Air Seeders 9
Anhydrous Ammonia Applicators 9
Cultivators, Field 10
Cultivators, Heavy Duty 11
Disks, Heavy Breaking 12
Disks, Heavy Tandem 12
Drills, Disk Press 12
Drills, Zero Till Gravity Disk 13
Fertilizer Spreaders 13
Grain Augers with PTO 13
Grain Conveyors with PTO 13
Grain Dryers, Batch 13
Grain Carts 14
Grain Vacs 14
Granular Herbicide Applicators: Cultivator Mount and Trailer Type 14
Harrows, Standard 5 Bar Tine 15
Harrows, Heavy 15
Harrow Packers 15
Land Rollers 16
Plows 16
Rock Pickers 16
Rock Rakes 16
Rock Picker, Rock Rake Combinations 16
Sprayers, Pull Type 17
Swathers, Pull Type 17
Swath Roller 17

Drawn Equipment - Livestock and Forage
Bale Movers, Large Round 18
Bale Processors 18
Balers, Large Round 18
Balers, Standard 18
Balers, Large Rectangular 18
Bale Wagons, Pull Type 18
Forage Harvesters, Pull Type 19
Grinder Mixers 19
Hay Rakes 19
Manure Spreaders 20
Mower Conditioners: Sickle and Disc 20
Mowers, Sickle 21
Post Pounders 21
Rotary Cutters 21
Trailers, Livestock 21
Tub Grinders 21
Vertical Feed Mixers 21

Drawn Equipment - Miscellaneous
Front End Loaders 22
Scrapers 22
Snow Blowers 22

Appendix A **Page**
Custom Grain Hauling
- Farm to Market 23
- Seed to the Field 23
- Field to Yard 24

Custom Large Round Bale Hauling
- Field to Yard 25

Custom Water Hauling
- Field Spraying 25

Custom High Clearance Sprayer
- Transportation Costs 26

Appendix B
Combine Classification 27
High Clearance Sprayer Classification 27

Appendix C
Rental Rate Calculation Worksheet 28

Appendix D
Custom Rate Calculation Worksheet 29

Appendix E
Formulas Used in Calculations 30

Appendix F **Page**
Machinery Cost Calculation Guide 31

Appendix G
Rental of Farm Buildings Worksheet 35

Appendix H
Factors to Consider When Custom Hiring 36
Sample Custom Farming Agreement 37

INTRODUCTION

This publication gives detailed information regarding guidelines for machine cwnership, operating costs, custom rates and rental rates for farm machinery. **This information is provided as a guideline and must be interpreted and adjusted for individual situations.**

The costs calculated in this publication use the list price less a discount to arrive at an average selling price of a new machine. Machine companies may reduce the actual selling price of the machinery below their suggested retail prices. The intent of this publication is to estimate both the ownership (fixed) and operating (variable) costs of owning machinery.

The farmer who has already invested in a machine for his own use may be in a position to do custom work for a neighbour for the suggested custom rate, less some portion of the investment cost, and still realize a return. A farmer doing work for a neighbour would need to charge at least enough to cover the operating (variable) costs of the equipment and an amount to cover labour costs.

There may be individuals who have a custom farming business. In this instance, all costs that are calculated must be included, plus overhead costs (transportation, liability insurance, utility costs, advertising, shop equipment). Custom operators should determine these overhead costs before establishing their rates.

Assumptions

1. Interest on investment is calculated at 5.6% and assumes machinery investment is 50% owned, and 50% borrowed. The interest rate is calculated by averaging the five year term deposit rate, with the five year machinery loan interest rate.

2. Diesel fuel is charged at $0.71 per litre; gasoline is charged at $0.80 per litre. The Saskatchewan fuel tax of $0.15 per litre on diesel fuel has been removed, as both farmers and custom operators are eligible for this exemption. **The 7% GST was deducted in calculating the gasoline and diesel prices because custom operators and farmers can apply for an input tax credit on these items.** At the time of printing, farmers and custom operators are also eligible for a $.12 per litre Saskatchewan tax exemption on their gasoline purchases used in the farming operation. For further information, contact the Farm Fuel Program in Regina, toll free at 1-800-667-7587. Oil and grease is charged at $0.40 per hour for each 100 hp.

3. Labour is charged at $11.00 per hour.

4. Propane is charged at $0.48 per litre.

Explanation of Custom Rate Guide Tables

The first section of this publication is a summary of selected custom farming operations and the custom rate for each operation. The following pages contain detailed calculations that were used to arrive at the rental or custom rate for specific farm equipment. This detailed information is provided in a table format that includes:

1. machine costs per hour,
2. machine rental per hour, and
3. custom work rates.

Machine Cost Per Hour Table

The basis for calculating the machine cost data is the cost of **new** equipment. This information was collected in February 2006 using the most current equipment pricing guides of the major equipment manufacturers and various shortline manufacturers. The manufacturers' suggested retail price was discounted 10% on machines valued up to $50,000, 15% for machines valued between $50,000 and $100,000 and 18% for machines valued over $100,000.

The machine cost data is given for a wide variety of farm equipment under different ranges of annual hours of use. The data is specific to each individual machine and includes fixed costs (depreciation, investment cost, insurance and housing) and variable costs (repairs, fuel, oil and grease). The total cost per hour figure is the total cost of owning and operating that particular machine.

Machine Rental Per Hour Table

The rental rates section deals specifically with renting equipment for **short time periods**. The rates are not designed as lease rates. The rates should not be used for long term or seasonal lease arrangements.

Rental rates are calculated by adding the fixed costs (ownership costs) and repair costs to arrive at the basic rental costs. The margin is calculated by multiplying the basic rental costs by 15%. The margin is added to cover risk, profit and management. The rental rates include an allowance for repair only. The renter is responsible for fuel and lubrication. No account is made to cover neglect by the renter. In the case of neglect, a settlement between the parties involved must be negotiated.

The rental rate is the total of the basic rental costs and the 15% margin. The rental rates are specific to each machine. If a complement (tractor and machine) is rented, the rental rate would be the total of the two machine rental rates.

The average rental rate is listed in each category of machines as a guide, and is calculated using the average rental rate for the middle number of hours of use.

Custom Work Rates Table

The custom work rates section deals specifically with rates for custom work, including both the machine(s) and operator. The basic custom work costs are calculated by summing the total costs of the power unit (if applicable), machine, and the labour allowance per hour. A margin to cover risk, profit, management and an incentive for the operator is calculated by multiplying the basic custom work rates by 15%. The custom rate is then determined by adding the basic custom work rate and the margin. In all cases, a basic labour rate of $11.00 per hour is used. The average custom rate is calculated for the middle number of hours of use for all machines.

In the case of drawn equipment, a power unit suitable to that machine being drawn has been selected, and the total cost of both the power unit and the drawn machine have been added together to arrive at an overall total cost for that operation.

The information provided in all three segments of the table is based on average conditions and should be used as a guide only.

Additional points to consider when negotiating a custom work agreement are outlined in Appendix G, along with a sample of a custom farming agreement.

An additional aid in calculating custom rates is Alberta's Farm Machinery Cost Calculator. It is available on their website at: **http://www.agric.gov.ab.ca.**

The information in this guide is on Saskatchewan Agriculture and Food's website, along with most other publications that are produced by Saskatchewan Agriculture and Food.

For copies of this document, contact the Agriculture Knowledge Centre at 1-866-457-2377, or reach us at our website address: **http://www.agr.gov.sk.ca** to download from the web or phone the Crop Development Branch at 787-6613.

May 2006

Classification of Air Drills, Air Seeders and Zero Till Drills

There are several types of air seeding and zero till seeding tools. This classification should help to remove uncertainty as to which category air seeders and zero till seeders fit into. The following classification for air drills, air seeders and zero till gravity drills has been developed with the assistance of PAMI.

Air Disk Drill

- row packer wheels are incorporated in to the design that supports the rear half of the drill
- an air system is used to deliver the seed and fertilizer
- high clearance
- heavy duty trips
- generally used to seed into untilled soil
- speed used in work rate calculation of approximately 4.5 m.p.h.
- also includes side banding air disk drills with gauge packers.

Air Hoe Drills

- row packer wheels are incorporated in to the design that supports the rear half of the air hoe drill
- also includes side banding air hoe drills with individual gauge packers
- an air system is used to deliver the seed and fertilizer
- high clearance
- heavy duty trips (400 lb+)
- generally used to seed into untilled soil
- speed used in work rate calculation of approximately 4.5 m.p.h.

Air Seeders

- a cultivator-type tillage tool, with in-frame wheels, equipped with sweep-type openers using an air system to deliver the seed and fertilizer
- no on row packer wheels
- typically followed by a harrow packer
- speed used in work rate calculation of approximately 5.5 m.p.h.

Zero Till Gravity Disk/Drills

- capable of seeding directly into untilled soil using narrow openers to minimize soil disturbance
- a gravity system is used to deliver the seed and fertilizer
- has row packer wheels
- may be single-or double-shoot system
- speed used in work rate calculation of approximately 4.5 m.p.h.

How To Use This Publication

1. Use the table of contents to locate the machine. Equipment is divided into the following sections: a. Powered Equipment, b. Drawn Equipment - Grain, c. Drawn Equipment - Livestock and Forage, d. Drawn Equipment - Miscellaneous. Equipment is listed alphabetically within each section.

2. Locate the size of machine to be used and the number of hours of annual use (if you are unsure of the annual hours of work, use the middle rate). The rental rate per hour and custom rate are calculated for each amount of usage. Mathematical rounding of some of the calculations may cause an error of one or two cents. The calculated custom rate is the correct figure.

3. **Calculating a custom rate for used equipment**
   If you require a custom rate for used equipment or for a number of hours not included in this publication, you can calculate your own custom rate using the blank worksheet in Appendix D. If the machine is not listed in this publication, use the cost formulas from Appendix F, for a similar machine. The blank worksheet in Appendix D can also be used to calculate a custom rate using a different number of annual hours of use. If your machine has a lower value than the one in this publication, you can use the lower value to calculate the machine's investment cost. However, you should use the original cash cost to calculate repair costs. Using a value less than the original cash cost will underestimate repair costs.

4. Some operations, such as seeding, fertilizing or spraying, require the use of a truck to haul seed, fertilizer or water to the field. The cost of the truck has not been included in the spraying or fertilizing custom rates. For an example of calculating truck usage, see Appendix A.

5. Power units have been matched with drawn implements for average working conditions. Some soils may require a larger power unit than the one required for average conditions. Some operations, in certain conditions, could be performed using a smaller power unit than the one used in this publication.

6. This publication uses the cost approach of calculating custom rates. The cost approach may differ from the custom rate normally charged by custom operators for some operations. **In reality, the forces of supply and demand will determine the custom rates charged by custom operators.**

Summary of the Average Calculated Custom Rates

The following list is a summary of selected custom farming operations and their calculated custom rates. These are calculated rates only and require adjustment for individual situations. The average calculated custom rate is the average of the custom rates for each size of a particular machine for the middle number of hours of annual usage. **Exercise caution when using these "average" figures, as they may not reflect actual situations.**

2006 Average Calculated Custom Rates

	Average Custom Rate
Powered Equipment	
Bale Wagons SP	$ 0.66/bale
Combines with flex header	22.64/ac
Grain Augers (7", 38-45 ft) plus margin (15%)	16.64/hr
Sprayers SP (additional costs included)	2.80/ac
Swathers SP	14.49/ac
Tractors 2WD 50-59 hp	28.45/hr
180-199 hp	87.24/hr
Tractors 4WD 100-130 hp	69.62/hr
400-425 hp	120.16/hr
Trucks pick-up 3/4 ton	55.07/hr
Trucks grain 1 ton	78.96/hr
Trucks grain 3 ton	120.50/hr
Trucks grain 4 ton	147.03/hr
Drawn Equipment - Grain	
Air Disk Drills	$16.21/ac
Air Hoe Drills	13.61/ac
Air Seeders	11.17/ac
Anhydrous Ammonia Applicators	8.03/ac
Cultivators, Field	5.48/ac
Cultivators, Heavy Duty	6.05/ac
Disks, Heavy Breaking	17.90/ac
Disks, Heavy Tandem	8.44/ac
Drills, Disk Press	9.48/ac
Drills, Zero Till Gravity Disk	15.60/ac
Fertilizer Spreaders	2.75/ac
Grain Augers PTO (8", 40-51 ft)	.012/bu
Grain Augers PTO (10", 50-60 ft)	.0087/bu
Grain Augers PTO (13", 60-90 ft)	.0095/bu
Grain Conveyors PTO (15"belt, 60-65 ft)	$0.0077/bu
Grain Dryers, Batch/Continuous (each % dried)	.10/bu
Grain Carts 1100 bu	69.43/hr
Grain Vacs	.04/bu
Granular Herbicide Applicators- Cult. Mount	.64/ac
Granular Herbicide Applicators - Trailer Type	1.75/ac
Harrows, Standard 5 Bar Tine	2.59/ac
Harrows, Heavy	2.10/ac
Harrow Packers	4.38/ac
Land Rollers	4.43/ac
Plows	18.20/ac
Rock Pickers, 3 Paddle Hydraulic	71.35/hr
Rock Pickers, Extra Large	80.30/hr
Rock Rakes 20 ft	64.64/hr
Rock Pickers-Rock Rakes 20-22 ft hyd	91.75/hr
Sprayers, PTO (hauling water incl.)	4.08/ac
Swathers, Single Swath	5.48/ac
Swath Rollers	.12/ac
Drawn Equipment - Livestock and Forage	
Bale Movers, 7-8 Bales	$ 64.30/hr
Bale Movers, 14-16 Bales	107.36/hr
Bale Processors	79.73/hr
Balers Large Round 5'x6' (twine incl)	11.18/bale
Balers, Standard, 14"x18" (twine incl)	.51/bale
Balers, Large Rectangular (twine incl)	8.70/bale
Bale Wagons, PTO	.54/bale
Forage Harvesters, Medium	147.32/hr
Grinder Mixer, 500-600 bu	80.25/hr
Hay Rake, 15 ft wheel	5.00/ac
Manure Spreaders 140-199 cu ft	58.01/hr
Mower Conditioners-Sickle	$ 15.42/ac
Mowers, Sickle	11.45/ac
Post Pounders 350lb hammer	42.55/hr
Rotary Cutter, 10 ft trailing	67.04/hr
Trailers, Livestock, 16 ft Bumper	64.34/hr
Tub Grinder 8 T	84.74/hr
Vertical Feed Mixers 600-1000 cu ft	119.14/hr
Front-end Loaders, 70-140 hp	58.03/hr
Scraper, 5.5-6.5 yd	116.60/h:
Snow Blowers, 8 ft Front Mount	93.27/hr
Snow Blowers, 8 ft Rear Mount	55.78/hr

Custom Trucking

Custom Rate from farm to market is $0.13/bu for the first 3 miles plus $0.017/bu for each additional mile.

* Custom Rate from field to yard hauling from one combine is $0.16/bu. for the first mile plus $0.015/bu for each additional mile.

POWERED EQUIPMENT

MACHINE SIZE	ORIG. COST	ANN. HOURS OF USE	FUEL TYPE AND LITRE /HOUR	MACHINE COMPONENT COSTS PER HOUR: FIXED COST $/HR.	REPAIR COST $/HR.	FUEL COST $/HR.	LUBE & OIL COST /HR.	TOTAL PER HR. COST NO LABOUR $/HR.	LAB. COST $/HR.	MACHINE RENTAL PER HOUR: BASIC RENTAL COSTS $/HR.	MARGIN $/HR.	RENTAL RATE $/HR.	CUSTOM WORK RATES: BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
BALE WAGONS SP																	$/BALE
160 BALE	156100	60	23	239.95	52.03	16.33	0.4	308.71		291.98	43.80	335.78	319.71	47.96	367.67		0.98
(100 HP)		100	(D)	157.35	31.22	16.33	0.4	205.30	11.00	188.57	28.29	216.85	216.30	32.44	248.74	375	0.66
		140		122.68	22.30	16.33	0.4	161.71		144.98	21.75	166.73	172.71	25.91	198.62	BL/HR	0.53
								Average Rental Rate per Bale				0.58	Average Custom Rate per Bale				0.66
COMBINES SP CONVENTIONAL - NO HEADER																	
CLASS 5	176600	120		161.93	47.09	17.75	0.76	227.53		209.02	31.35	240.38	238.53	35.78	274.31		
<300hp/<250bu hopper		150	25	136.34	37.67	17.75	0.76	192.52		174.01	26.10	200.11	203.52	30.53	234.05		
		180	(D)	120.30	31.40	17.75	0.76	170.21	11.00	151.70	22.75	174.45	181.21	27.18	208.39		
		350		74.01	16.15	17.75	0.76	108.67		90.16	13.52	103.68	119.67	17.95	137.62		
CLASS 6	249000	120		228.31	66.40	21.30	0.98	316.99		294.71	44.21	338.92	327.99	49.20	377.19		
300hp/<300bu hopper		150	30	192.23	53.12	21.30	0.98	267.63		245.35	36.80	282.15	278.63	41.79	320.42		
		180	(D)	169.62	44.27	21.30	0.98	236.17	11.00	213.89	32.08	245.97	247.17	37.08	284.24		
		350		104.35	22.77	21.30	0.98	149.40		127.12	19.07	146.19	160.40	24.06	184.46		
CLASS 7	272900	120		250.23	72.77	24.85	1.12	348.97		323.00	48.45	371.45	359.97	54.00	413.97		
>300hp/300bu hopper		150	35	210.68	58.22	24.85	1.12	294.87		268.90	40.33	309.23	305.87	45.88	351.75		
		180	(D)	185.90	48.52	24.85	1.12	260.39	11.00	234.42	35.16	269.58	271.39	40.71	312.10		
		350		114.37	24.95	24.85	1.12	165.29		139.32	20.90	160.22	176.29	26.44	202.73		
CLASS 7+	313700	120		287.64	83.65	28.40	1.12	400.81		371.29	55.69	426.99	411.81	61.77	473.58		
>350hp/>300bu hopper		150	40	242.18	66.92	28.40	1.12	338.62		309.10	46.36	355.46	349.62	52.44	402.06		
		180	(D)	213.70	55.77	28.40	1.12	298.99	11.00	269.47	40.42	309.88	309.99	46.50	356.48		
		350		131.47	28.68	28.40	1.12	189.67		160.15	24.02	184.17	200.67	30.10	230.77		
COMBINES SP ROTARY - NO HEADER																	
CLASS 5	201300	120		184.58	53.68	17.75	0.80	256.81		238.26	35.74	274.00	267.81	40.17	307.98		
<300hp/<250bu hopper		150	25	155.40	42.94	17.75	0.80	216.90		198.35	29.75	228.10	227.90	34.18	262.08		
		180	(D)	137.13	35.79	17.75	0.80	191.46	11.00	172.91	25.94	198.85	202.46	30.37	232.83		
		350		84.36	18.40	17.75	0.80	121.32		102.77	15.42	118.18	132.32	19.85	152.17		
CLASS 6	248700	120		228.04	66.32	21.30	1.00	316.66		294.36	44.15	338.51	327.66	49.15	376.81		
300hp/<300bu hopper		150	30	192.00	53.06	21.30	1.00	267.35		245.05	36.76	281.81	278.35	41.75	320.11		
		180	(D)	169.42	44.21	21.30	1.00	235.93	11.00	213.63	32.04	245.68	246.93	37.04	283.97		
		350		104.23	22.74	21.30	1.00	149.27		126.97	19.04	146.01	160.27	24.04	184.31		
CLASS 7	255800	120		234.55	68.21	24.85	1.20	328.81		302.76	45.41	348.18	339.81	50.97	390.78		
>300hp/300bu hopper		150	35	197.48	54.57	24.85	1.20	278.10		252.05	37.81	289.86	289.10	43.36	332.46		
		180	(D)	174.25	45.48	24.85	1.20	245.78	11.00	219.73	32.96	252.69	256.78	38.52	295.30		
		350		107.20	23.39	24.85	1.20	156.64		130.59	19.59	150.18	167.64	25.15	192.79		
CLASS 7+	284100	120		260.50	75.76	28.40	1.20	365.86		336.26	50.44	386.70	376.86	56.53	433.39		
>350hp/>300bu hopper		150	40	219.33	60.61	28.40	1.20	309.53		279.93	41.99	321.92	320.53	48.08	368.61		
		180	(D)	193.53	50.51	28.40	1.20	273.64	11.00	244.04	36.61	280.64	284.64	42.70	327.33		
		350		119.06	25.97	28.40	1.20	174.64		145.04	21.76	166.79	185.64	27.85	213.48		

COMBINE ATTACHMENTS - HEADERS

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARG $/HR.	HEADER RENTAL RATE /HR.	TOTAL MACH COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	COMBINE/ HEADER CALC. CUSTOM RATE
PICKUP HEADERS																$/AC
14 FT	20500	100	17.94	5.54	23.47	23.47	3.52	26.99	23.47			280.25	42.04	322.29		21.49
		150	12.81	3.69	16.50	16.50	2.48	18.98	16.50			273.28	40.99	314.27		20.95
		200	9.99	2.77	12.76	12.76	1.91	14.68	12.76			269.54	40.43	309.97		20.66
		250	8.35	2.21	10.56	10.56	1.58	12.14	10.56	245.78	11.00	267.34	40.10	307.44	15.0	20.50
		300	7.29	1.85	9.14	9.14	1.37	10.51	9.14			265.92	39.89	305.81	AC/HR	20.39
16 FT	26000	100	22.75	7.02	29.77	29.77	4.47	34.24	29.77			314.41	47.16	361.57		20.09
		150	16.25	4.68	20.93	20.93	3.14	24.07	20.93			305.57	45.84	351.40		19.52
		200	12.68	3.51	16.19	16.19	2.43	18.61	16.19			300.82	45.12	345.95		19.22
		250	10.59	2.81	13.39	13.39	2.01	15.40	13.39	273.64	11.00	298.03	44.70	342.74	18.0	19.04
		300	9.25	2.34	11.59	11.59	1.74	13.33	11.59			296.23	44.43	340.66	AC/HR	18.93
					*Average Rental Rate per Hour			13.77				Average Custom Rate per Acre				19.77

a) 14': used Class 7 Rotary Combine Power Unit Costs and corresponding 15 ac/hr workrate
b) 16': used Class 7+ Rotary Combine Power Unit Costs and corresponding 18 ac/hr workrate
*To obtain a per acre custom charge for headers, divide Header Rental Rate/Hour by the ac/hr work rate of your combine.

RIGID HEADERS WITH BATT REELS																$/AC
20 FT	21400	100	18.73	5.78	24.50	24.50	3.68	28.18	24.50			226.97	34.05	261.01		26.10
		150	13.38	3.85	17.23	17.23	2.58	19.81	17.23			219.69	32.95	252.65		25.26
		200	10.43	2.89	13.32	13.32	2.00	15.32	13.32			215.79	32.37	248.15		24.82
		250	8.71	2.31	11.02	11.02	1.65	12.68	11.02	191.46	11.00	213.49	32.02	245.51	10.0	24.55
		300	7.61	1.93	9.54	9.54	1.43	10.97	9.54			212.00	31.80	243.80	AC/HR	24.38
25 FT	23200	100	20.30	6.26	26.56	26.56	3.98	30.55	26.56			273.49	41.02	314.52		26.21
		150	14.50	4.18	18.68	18.68	2.80	21.48	18.68			265.61	39.84	305.45		25.45
		200	11.31	3.13	14.44	14.44	2.17	16.61	14.44			261.37	39.21	300.58		25.05
		250	9.45	2.51	11.95	11.95	1.79	13.74	11.95	235.93	11.00	258.88	38.83	297.71	12.0	24.81
		300	8.25	2.09	10.34	10.34	1.55	11.89	10.34			257.27	38.59	295.86	AC/HR	24.66
30 FT	26200	100	22.93	7.07	30.00	30.00	4.50	34.50	30.00			286.78	43.02	329.80		21.99
		150	16.38	4.72	21.09	21.09	3.16	24.25	21.09			277.87	41.68	319.55		21.30
		200	12.77	3.54	16.31	16.31	2.45	18.76	16.31			273.09	40.96	314.05		20.94
		250	10.67	2.83	13.50	13.50	2.02	15.52	13.50	245.78	11.00	270.28	40.54	310.82	15.0	20.72
		300	9.32	2.36	11.68	11.68	1.75	13.43	11.68			268.46	40.27	308.73	AC/HR	20.58
					*Average Rental Rate per Hour			13.98				Average Custom Rate per Acre				23.36

a) 20': used Class 5 Rotary Combine Power Unit Costs and corresponding 10 ac/hr workrate
b) 25': used Class 6 Rotary Combine Power Unit Costs and corresponding 12 ac/hr workrate
c) 30': used Class 7 Rotary Combine Power Unit Costs and corresponding 15 ac/hr workrate
*To obtain a per acre custom charge for headers, divide Header Rental Rate/Hour by the ac/hr work rate of your combine.

COMBINE ATTACHMENTS - HEADERS

MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	MACHINE COSTS PER HOUR: FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	MACHINE RENTAL PER HOUR: BASIC RENTAL COST $/HR.	HEADER RENTAL MARG $/HR.	HEADER RENTAL RATE /HR.	CUSTOM WORK RATES: TOTAL MACH COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	COMBINE/ HEADER CALC. CUSTOM RATE $/AC
FLEX HEADERS WITH PICKUP REELS																
20 FT	27700	100	24.24	7.48	31.72	31.72	4.76	36.47	31.72			234.18	35.13	269.31		26.93
		150	17.31	4.99	22.30	22.30	3.34	25.64	22.30			224.76	33.71	258.48		25.85
		200	13.50	3.74	17.24	17.24	2.59	19.83	17.24			219.71	32.96	252.66		25.27
		250	11.28	2.99	14.27	14.27	2.14	16.41	14.27	191.46	11.00	216.73	32.51	249.24	10.0	24.92
		300	9.85	2.49	12.35	12.35	1.85	14.20	12.35			214.81	32.22	247.03	AC/HR	24.70
25 FT	30400	100	26.60	8.21	34.81	34.81	5.22	40.03	34.81			281.74	42.26	324.00		27.00
		150	19.00	5.47	24.47	24.47	3.67	28.14	24.47			271.40	40.71	312.11		26.01
		200	14.82	4.10	18.92	18.92	2.84	21.76	18.92			265.85	39.88	305.73		25.48
		250	12.38	3.28	15.66	15.66	2.35	18.01	15.66	235.93	11.00	262.59	39.39	301.98	12.0	25.16
		300	10.82	2.74	13.55	13.55	2.03	15.58	13.55			260.48	39.07	299.55	AC/HR	24.96
30 FT	34200	100	29.93	9.23	39.16	39.16	5.87	45.03	39.16			295.94	44.39	340.33		22.69
		150	21.38	6.16	27.53	27.53	4.13	31.66	27.53			284.31	42.65	326.96		21.80
		200	16.67	4.62	21.29	21.29	3.19	24.48	21.29			278.07	41.71	319.78		21.32
		250	13.92	3.89	17.62	17.62	2.64	20.26	17.62	245.78	11.00	274.40	41.16	315.56	15.0	21.04
		300	12.17	3.08	15.25	15.25	2.29	17.53	15.25			272.02	40.80	312.83	AC/HR	20.86
36 FT	38300	100	33.51	10.34	43.85	43.85	6.58	50.43	43.85			328.49	49.27	377.77		20.99
		150	23.94	6.89	30.83	30.83	4.62	35.46	30.83			315.47	47.32	362.79		20.16
		200	18.67	5.17	23.84	23.84	3.58	27.42	23.84			308.48	46.27	354.75		19.71
		250	15.59	4.14	19.73	19.73	2.96	22.69	19.73	273.64	11.00	304.37	45.66	350.02	18.0	19.45
		300	13.63	3.45	17.07	17.07	2.56	19.63	17.07			301.71	45.26	346.97	AC/HR	19.28
						*Average Rental Rate per Hour		19.34				Average Custom Rate per Acre				22.64

a) 20': used Class 5 Rotary Combine Power Unit Costs and corresponding 10 ac/hr workrate
b) 25': used Class 6 Rotary Combine Power Unit Costs and corresponding 12 ac/hr workrate
c) 30': used Class 7 Rotary Combine Power Unit Costs and corresponding 15 ac/hr workrate
d) 36': used Class 7+ Rotary Combine Power Unit Costs and corresponding 18 ac/hr workrate
*To obtain a per acre custom charge for headers, divide Header Rental Rate/Hour by the ac/hr work rate of your combine.

DRAPER STYLE HEADERS WITH PICKUP REELS																
20 FT	31900	100	27.91	8.61	36.53	36.53	5.48	42.00	36.53			238.99	35.85	274.84		27.48
		150	19.94	5.74	25.68	25.68	3.85	29.53	25.68			228.14	34.22	262.37		26.24
		200	15.55	4.31	19.86	19.86	2.98	22.84	19.86			222.32	33.35	255.67		25.57
		250	12.99	3.45	16.43	16.43	2.46	18.90	16.43	191.46	11.00	218.90	32.83	251.73	10.0	25.17
		300	11.35	2.87	14.22	14.22	2.13	16.35	14.22			216.68	32.50	249.19	AC/HR	24.92
25 FT	36600	100	32.03	9.88	41.91	41.91	6.29	48.19	41.91			288.84	43.33	332.16		27.68
		150	22.88	6.59	29.46	29.46	4.42	33.88	29.46			276.39	41.46	317.85		26.49
		200	17.84	4.94	22.78	22.78	3.42	26.20	22.78			269.71	40.46	310.17		25.85
		250	14.90	3.95	18.85	18.85	2.83	21.68	18.85	235.93	11.00	265.79	39.87	305.65	12.0	25.47
		300	13.02	3.29	16.32	16.32	2.45	18.76	16.32			263.25	39.49	302.73	AC/HR	25.23
30 FT	40900	100	35.79	11.04	46.83	46.83	7.02	53.86	46.83			303.61	45.54	349.15		23.28
		150	25.56	7.36	32.92	32.92	4.94	37.86	32.92			289.70	43.46	333.16		22.21
		200	19.94	5.52	25.46	25.46	3.82	29.28	25.46			282.24	42.34	324.58		21.64
		250	16.65	4.42	21.07	21.07	3.16	24.23	21.07	245.78	11.00	277.85	41.68	319.53	15.0	21.30
		300	14.55	3.68	18.23	18.23	2.73	20.97	18.23			275.01	41.25	316.26	AC/HR	21.08
36 FT	44600	100	39.03	12.04	51.07	51.07	7.66	58.73	51.07			335.71	50.36	386.06		21.45
		150	27.88	8.03	35.90	35.90	5.39	41.29	35.90			320.54	48.08	368.62		20.48
		200	21.74	6.02	27.76	27.76	4.16	31.93	27.76			312.40	46.86	359.26		19.96
		250	18.16	4.82	22.98	22.98	3.45	26.42	22.98	273.64	11.00	307.61	46.14	353.76	18.0	19.65
		300	15.87	4.01	19.88	19.88	2.98	22.86	19.88			304.52	45.68	350.20	AC/HR	19.46
40 FT	46800	100	40.95	12.64	53.59	53.59	8.04	61.62	53.59			338.23	50.73	388.96		19.45
		150	29.25	8.42	37.67	37.67	5.65	43.33	37.67			322.31	48.35	370.66		18.53
		200	22.82	6.32	29.13	29.13	4.37	33.50	29.13			313.77	47.07	360.84		18.04
		250	19.05	5.05	24.11	24.11	3.62	27.72	24.11	273.64	11.00	308.75	46.31	355.06	20.0	17.75
		300	16.65	4.21	20.86	20.86	3.13	23.99	20.86			305.50	45.83	351.33	AC/HR	17.57
						*Average Rental Rate per Hour		23.79				Average Custom Rate per Acre				21.87

a) 20': used Class 5 Rotary Combine Power Unit Costs and corresponding 10 ac/hr workrate
b) 25': used Class 6 Rotary Combine Power Unit Costs and corresponding 12 ac/hr workrate
c) 30': used Class 7 Rotary Combine Power Unit Costs and corresponding 15 ac/hr workrate
d) 36': used Class 7+ Rotary Combine Power Unit Costs and corresponding 18 ac/hr workrate
e) 40': used Class 7+ Rotary Combine Power Unit Costs and corresponding 20 ac/hr workrate
*To obtain a per acre custom charge for headers, divide Header Rental Rate/Hour by the ac/hr work rate of your combine.

POWERED EQUIPMENT

MACHINE SIZE	ORIG. COST	ANN. HOURS OF USE	FUEL TYPE AND LITRE /HOUR	MACHINE COMPONENT COSTS PER HOUR: FIXED COST $/HR.	REPAIR COST $/HR.	FUEL COST $/HR.	LUBE & OIL COST /HR.	TOTAL PER HR. COST NO LABOUR $/HR.	LAB. COST $/HR.	MACHINE RENTAL PER HOUR: BASIC RENTAL COSTS $/HR.	MARGIN $/HR.	RENTAL RATE $/HR.	CUSTOM WORK RATES: BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
GRAIN AUGERS															SEE		
7 IN.	4700	25	1	17.07	3.76	0.80	0.06	21.69		20.83	3.12	23.95					
30-37 FT		50	(G)	9.48	1.88	0.80	0.06	12.22		11.36	1.70	13.06			GRAIN		
(W/16 HP)		75		6.90	1.25	0.80	0.06	9.01		8.15	1.22	9.37					
															HAULING		
7 IN.	5500	25	1.4	19.98	4.40	1.12	0.06	25.56		24.38	3.66	28.03					
38-45 FT		50	(G)	11.09	2.20	1.12	0.06	14.47		13.29	1.99	15.28			SECTION		
(W/18 HP)		75		8.07	1.47	1.12	0.06	10.72		9.54	1.43	10.97					
8 IN.	6500	25	2.0	23.61	5.20	1.60	0.06	30.47		28.81	4.32	33.13					
40-51 FT		50	(G)	13.10	2.60	1.60	0.06	17.37		15.70	2.36	18.06					
(W/20 HP)		75		9.54	1.73	1.60	0.06	12.93		11.27	1.69	12.96					
SPRAYER, HIGH CLEARANCE																	$/AC
CLASS 1																	
110 HP/<450 gal tank		200		58.42	17.66	10.65	0.44	87.17		76.08	11.41	87.49	98.17	14.73	112.89		1.41
80 FT BOOM		300		41.24	11.77	10.65	0.44	64.10		53.01	7.95	60.96	75.10	11.27	86.37		1.08
	100900	400	15	32.99	8.83	10.65	0.44	52.91		41.82	6.27	48.10	63.91	9.59	73.50		0.92
		500	(D)	28.41	7.06	10.65	0.44	46.57	11.00	35.48	5.32	40.80	57.57	8.63	66.20	80.0	0.83
		600		25.78	5.89	10.65	0.44	42.76		31.67	4.75	36.42	53.76	8.06	61.82	AC/HR	0.77
CLASS 3																	
<200 HP/<850 gal tank		200		92.64	28.00	14.20	0.50	135.34		120.64	18.10	138.74	146.34	21.95	168.29		2.10
80 FT BOOM		300		65.40	18.67	14.20	0.50	98.76		84.06	12.61	96.67	109.76	16.46	126.23		1.58
	160000	400	20	52.32	14.00	14.20	0.50	81.02		66.32	9.95	76.27	92.02	13.80	105.82		1.32
		500	(D)	45.06	11.20	14.20	0.50	70.96	11.00	56.26	8.44	64.69	81.96	12.29	94.25	80.0	1.18
		600		40.88	9.33	14.20	0.50	64.91		50.21	7.53	57.75	75.91	11.39	87.30	AC/HR	1.09
CLASS 4																	
<250 HP/<1000 gal tank		200		114.87	34.72	21.30	0.72	171.61		149.59	22.44	172.03	182.61	27.39	210.01		2.33
90 FT BOOM		300		81.09	23.15	21.30	0.72	126.26		104.24	15.64	119.87	137.26	20.59	157.85		1.75
	196400	400	30	64.88	17.36	21.30	0.72	104.26		82.24	12.34	94.57	115.26	17.29	132.55		1.47
		500	(D)	55.87	13.89	21.30	0.72	91.78	11.00	69.76	10.46	80.22	102.78	15.42	118.19	90.0	1.31
		600		50.69	11.57	21.30	0.72	84.28		62.26	9.34	71.60	95.28	14.29	109.58	AC/HR	1.22
CLASS 4																	
>250 HP/1200 gal tank		200		142.32	43.02	28.40	0.80	214.53		185.33	27.80	213.13	225.53	33.83	259.36		2.59
100 FT BOOM		300		100.47	28.68	28.40	0.80	158.34		129.14	19.37	148.51	169.34	25.40	194.74		1.95
	245800	400	40	80.38	21.51	28.40	0.80	131.08		101.88	15.28	117.17	142.08	21.31	163.40		1.63
		500	(D)	69.22	17.21	28.40	0.80	115.62	11.00	86.42	12.96	99.39	126.62	18.99	145.62	100.0	1.46
		600		62.80	14.34	28.40	0.80	106.34		77.14	11.57	88.71	117.34	17.60	134.94	AC/HR	1.35
								Average Rental Rate per Acre				1.10			Average Custom Rate per Acre		1.47
SWATHERS SP																	$/AC
18 FT	78900	60	13	121.28	28.93	9.23	0.30	159.74		150.21	22.53	172.74	170.74	25.61	196.35		23.10
STANDARD		100	(D)	79.53	17.36	9.23	0.30	106.42	11.00	98.89	14.53	111.42	117.42	17.61	135.03	8.5	15.89
TABLE		140		62.01	12.40	9.23	0.30	83.94		74.41	11.16	85.57	94.94	14.24	109.18	AC/HR	12.84
20-22 FT	91800	60	14	141.11	33.66	9.94	0.36	185.07		174.77	26.22	200.99	196.07	29.41	225.48		23.73
SLIDING		100	(D)	92.53	20.20	9.94	0.36	123.03	11.00	112.73	16.91	129.64	134.03	20.10	154.13	9.5	16.22
TABLE		140		72.15	14.43	9.94	0.36	96.87		86.57	12.99	99.56	107.87	16.18	124.06	AC/HR	13.06
24-26 FT	95500	60	14	146.80	35.02	9.94	0.36	192.11		181.81	27.27	209.09	203.11	30.47	233.58		20.31
SLIDING		100	(D)	96.26	21.01	9.94	0.36	127.57	11.00	117.27	17.59	134.87	138.57	20.79	159.36	11.5	13.86
TABLE		140		75.06	15.01	9.94	0.36	100.36		90.06	13.51	103.57	111.36	16.70	128.07	AC/HR	11.14
30 FT	100800	60	15	154.94	36.96	10.65	0.36	202.91		191.90	28.79	220.69	213.91	32.09	246.00		17.57
SLIDING		100	(D)	101.61	22.18	10.65	0.36	134.79	11.00	123.78	18.57	142.35	145.79	21.87	167.66	14.0	11.98
TABLE		140		79.22	15.84	10.65	0.36	106.07		95.06	14.26	109.32	117.07	17.56	134.63	AC/HR	9.62
								Average Rental Rate per Acre				12.18			Average Custom Rate per Acre		14.49

NOTE: For a custom spraying operation, the cost of transportation would be on average $0.45 /ac. See Appendix A.
- Cost of foam ranges from $ 03-$.25/ac.
- For the cost of hauling water to the field add $0.55/acre (assumes 7.5 gal/ac., 12 mile haul & $5.00/1200 gal water cost). See Appendix A.
- For the cost of hauling water to the field add $0.63/acre if the water truck driver is paid for waiting time.
- For a custom spraying operation add a charge for liability insurance and administration costs.

POWERED EQUIPMENT

				MACHINE COMPONENT COSTS PER HOUR						MACHINE RENTAL PER HOUR			CUSTOM WORK RATES				
MACHINE SIZE	ORIG. COST	ANN. HOURS OF USE	FUEL TYPE AND LITRE /HOUR	FIXED COST $/HR.	REPAIR COST $/HR.	FUEL COST $/HR.	LUBE & OIL COST /HR.	TOTAL PER HR. COST NO LABOUR $/HR.	LAB. COST $/HR.	BASIC RENTAL COSTS $/HR.	MARGIN $/HR.	RENTAL RATE $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
TRACTORS 2WD (PTO-HP)																	
		200		9.14	3.30	5.68	0.14	18.26		12.44	1.87	14.31	29.26	4.39	33.65		
		300		6.77	2.20	5.68	0.14	14.79		8.97	1.35	10.32	25.79	3.87	29.66		
30-39 HP	21300	400	8	5.48	1.65	5.68	0.14	12.95		7.13	1.07	8.20	23.95	3.59	27.54		
		600	(D)	3.91	1.10	5.68	0.14	10.83	11.00	5.01	0.75	5.76	21.83	3.27	25.10		
		800		3.17	0.83	5.68	0.14	9.82		4.00	0.60	4.59	20.82	3.12	23.94		
		200		10.94	3.95	6.39	0.18	21.46		14.89	2.23	17.13	32.46	4.87	37.33		
		300		8.10	2.64	6.39	0.18	17.31		10.74	1.61	12.35	28.31	4.25	32.56		
40-49 HP	25500	400	9	6.56	1.98	6.39	0.18	15.10		8.53	1.28	9.81	26.10	3.92	30.02		
		600	(D)	4.68	1.32	6.39	0.18	12.56	11.00	5.99	0.90	6.89	23.56	3.53	27.10		
		800		3.80	0.99	6.39	0.18	11.35		4.78	0.72	5.50	22.35	3.35	25.71		
		200		11.71	4.23	7.10	0.22	23.26		15.94	2.39	18.33	34.26	5.14	39.40		
		300		8.68	2.82	7.10	0.22	18.82		11.50	1.72	13.22	29.82	4.47	34.29		
50-59 HP	27300	400	10	7.02	2.12	7.10	0.22	16.46		9.14	1.37	10.51	27.46	4.12	31.58		
		600	(D)	5.01	1.41	7.10	0.22	13.74	11.00	6.42	0.96	7.38	24.74	3.71	28.45		
		800		4.06	1.06	7.10	0.22	12.44		5.12	0.77	5.89	23.44	3.52	26.96		
		200		14.84	5.36	9.94	0.26	30.41		20.21	3.03	23.24	41.41	6.21	47.62		
		300		11.00	3.58	9.94	0.26	24.77		14.57	2.19	16.76	35.77	5.37	41.14		
60-69 HP	34600	400	14	8.90	2.68	9.94	0.26	21.78		11.58	1.74	13.32	32.78	4.92	37.70		
		600	(D)	6.35	1.79	9.94	0.26	18.33	11.00	8.13	1.22	9.35	29.33	4.40	33.73		
		800		5.15	1.34	9.94	0.26	16.69		6.49	0.97	7.46	27.69	4.15	31.84		
		200		20.33	7.35	11.36	0.30	39.34		27.68	4.15	31.83	50.34	7.55	57.89		
		300		15.06	4.90	11.36	0.30	31.62		19.96	2.99	22.96	42.62	6.39	49.02		
70-79 HP	47400	400	16	12.19	3.67	11.36	0.30	27.52		15.86	2.38	18.24	38.52	5.78	44.30		
		600	(D)	8.69	2.45	11.36	0.30	22.80	11.00	11.14	1.67	12.81	33.80	5.07	38.87		
		800		7.05	1.84	11.36	0.30	20.55		8.89	1.33	10.22	31.55	4.73	36.28		
		200		21.15	7.64	12.78	0.34	41.91		28.79	4.32	33.11	52.91	7.94	60.85		
		300		15.67	5.09	12.78	0.34	33.88		20.76	3.11	23.88	44.88	6.73	51.62		
80-89 HP	49300	400	18	12.68	3.82	12.78	0.34	29.62		16.50	2.47	18.97	40.62	6.09	46.71		
		600	(D)	9.04	2.55	12.78	0.34	24.71	11.00	11.59	1.74	13.33	35.71	5.36	41.06		
		800		7.34	1.91	12.78	0.34	22.37		9.25	1.39	10.63	33.37	5.01	38.37		
		200		25.35	9.16	14.20	0.38	49.09		34.51	5.18	39.69	60.09	9.01	69.11		
		300		18.78	6.11	14.20	0.38	39.47		24.89	3.73	28.62	50.47	7.57	58.04		
90-99 HP	59100	400	20	15.20	4.58	14.20	0.38	34.36		19.78	2.97	22.75	45.36	6.80	52.16		
		600	(D)	10.84	3.05	14.20	0.38	28.47	11.00	13.89	2.08	15.98	39.47	5.92	45.39		
		800		8.80	2.29	14.20	0.38	25.67		11.09	1.66	12.75	36.67	5.50	42.17		
		200		33.29	12.03	16.33	0.44	62.09		45.32	6.80	52.12	73.09	10.96	84.05		
		300		24.66	8.02	16.33	0.44	49.45		32.68	4.90	37.58	60.45	9.07	69.52		
100-119 HP	77600	400	23	19.96	6.01	16.33	0.44	42.74		25.97	3.90	29.87	53.74	8.06	61.80		
		600	(D)	14.23	4.01	16.33	0.44	35.01	11.00	18.24	2.74	20.98	46.01	6.90	52.91		
		800		11.55	3.01	16.33	0.44	31.33		14.56	2.18	16.74	42.33	6.35	48.67		
		200		38.18	13.80	19.88	0.52	72.38		51.98	7.80	59.77	83.38	12.51	95.88		
		300		28.29	9.20	19.88	0.52	57.88		37.48	5.62	43.10	68.86	10.33	79.21		
120-139 HP	89000	400	28	22.89	6.90	19.88	0.52	50.19		29.79	4.47	34.25	61.19	9.18	70.36		
		600	(D)	16.32	4.60	19.88	0.52	41.32	11.00	20.92	3.14	24.06	52.32	7.85	60.17		
		800		13.25	3.45	19.88	0.52	37.09		16.69	2.50	19.20	48.09	7.21	55.31		
		200		48.13	17.39	22.72	0.60	88.84		65.52	9.83	75.35	99.84	14.98	114.82		
		300		35.66	11.59	22.72	0.60	70.57		47.25	7.09	54.34	81.57	12.24	93.81		
140-159 HP	112200	400	32	28.85	8.70	22.72	0.60	60.87		37.55	5.63	43.18	71.87	10.78	82.65		
		600	(D)	20.58	5.80	22.72	0.60	49.69	11.00	26.37	3.96	30.33	60.69	9.10	69.80		
		800		16.70	4.35	22.72	0.60	44.37		21.05	3.16	24.20	55.37	8.30	63.67		

NOTE: For MFWD add the following to the Custom Rate $/HR, for 30-99 HP add $0.03/HP/HR
for over 99HP add $0.03/HP/HR

POWERED EQUIPMENT

				MACHINE COMPONENT COSTS PER HOUR						MACHINE RENTAL PER HOUR			CUSTOM WORK RATES				
MACHINE SIZE	ORIG. COST	ANN. HOURS OF USE	FUEL TYPE AND LITRE /HOUR	FIXED COST $/HR.	REPAIR COST $/HR.	FUEL COST $/HR.	LUBE & OIL COST /HR.	TOTAL PER HR. COST NO LABOUR $/HR.	LAB. COST $/HR.	BASIC RENTAL COSTS $/HR.	MARGIN $/HR.	RENTAL RATE $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
TRACTORS 2WD continued (PTO-HP)																	
		200		55.77	20.15	27.69	0.68	104.29		75.92	11.39	87.31	115.29	17.29	132.58		
		300		41.32	13.43	27.69	0.68	83.12		54.75	8.21	62.96	94.12	14.12	108.24		
160-179 HP	130000	400	39	33.43	10.08	27.69	0.68	71.88		43.51	6.53	50.03	82.88	12.43	95.31		
		600	(D)	23.84	6.72	27.69	0.68	58.93	11.00	30.56	4.58	35.14	69.93	10.49	80.42		
		800		19.35	5.04	27.69	0.68	52.75		24.38	3.66	28.04	63.75	9.56	73.32		
		200		62.63	22.63	29.82	0.72	115.80		85.26	12.79	98.05	126.80	19.02	145.82		
		300		46.40	15.09	29.82	0.72	92.03		61.49	9.22	70.71	103.03	15.45	118.48		
180-199 HP	146000	400	42	37.55	11.32	29.82	0.72	79.40		48.86	7.33	56.19	90.40	13.56	103.96		
		600	(D)	26.77	7.54	29.82	0.72	64.86	11.00	34.32	5.15	39.47	75.86	11.38	87.24		
		800		21.73	5.66	29.82	0.72	57.93		27.39	4.11	31.49	68.93	10.34	79.27		
		200		73.92	26.71	31.95	0.72	133.29		100.62	15.09	115.72	144.29	21.64	165.94		
		300		54.76	17.80	31.95	0.72	105.23		72.56	10.88	83.45	116.23	17.44	133.67		
200-225 HP	172300	400	45	44.31	13.35	31.95	0.72	90.33		57.66	8.65	66.31	101.33	15.20	116.53		
		600	(D)	31.60	8.90	31.95	0.72	73.17	11.00	40.50	6.07	46.57	84.17	12.63	96.79		
		800		25.64	6.68	31.95	0.72	64.99		32.32	4.85	37.17	75.99	11.40	87.39		
		200		86.40	31.22	33.37	0.72	151.71		117.62	17.64	135.26	162.71	24.41	187.11		
		300		64.01	20.81	33.37	0.72	118.91		84.82	12.72	97.54	129.91	19.49	149.40		
226-250 HP	201400	400	47	51.79	15.61	33.37	0.72	101.49		67.40	10.11	77.51	112.49	16.87	129.37		
		600	(D)	36.93	10.41	33.37	0.72	81.43	11.00	47.34	7.10	54.44	92.43	13.86	106.29		
		800		29.97	7.80	33.37	0.72	71.87		37.78	5.67	43.44	82.87	12.43	95.30		
		200		87.39	31.57	34.79	0.72	154.47		118.96	17.84	136.80	165.47	24.82	190.29		
		300		64.74	21.05	34.79	0.72	121.30		85.79	12.87	98.66	132.30	19.84	152.14		
251+ HP	203700	400	49	52.39	15.79	34.79	0.72	103.68		68.17	10.23	78.40	114.68	17.20	131.89		
		600	(D)	37.36	10.52	34.79	0.72	83.39	11.00	47.88	7.18	55.06	94.39	14.16	108.55		
		800		30.32	7.89	34.79	0.72	73.72		38.21	5.73	43.94	84.72	12.71	97.43		

NOTE: For MFWD add the following to the Custom Rate $/HR, for 30-99 HP add $0.03/HP/HR
for over 99HP add $0.03/HP/HR

TRACTORS 4WD (Engine - HP)																	
		200		45.82	13.88	24.85	0.48	85.03		59.70	8.96	68.66	96.03	14.40	110.44		
		300		33.94	9.26	24.85	0.48	68.53		43.20	6.48	49.68	79.53	11.93	91.46		
100-130 HP	106800	400	35	27.47	6.94	24.85	0.48	59.74		34.41	5.16	39.57	70.74	10.61	81.35		
		600	(D)	19.59	4.63	24.85	0.48	49.54	11.00	24.21	3.63	27.85	60.54	9.08	69.62		
		800		15.89	3.47	24.85	0.48	44.70		19.37	2.90	22.27	55.70	8.35	64.05		
		200		71.39	21.63	29.11	1.10	123.23		93.02	13.95	106.97	134.23	20.13	154.36		
		300		52.88	14.42	29.11	1.10	97.52		67.31	10.10	77.40	108.52	16.28	124.79		
250-299 HP	186400	400	41	42.79	10.82	29.11	1.10	83.82		53.61	8.04	61.65	94.82	14.22	109.04		
		600	(D)	30.52	7.21	29.11	1.10	67.94	11.00	37.73	5.66	43.38	78.94	11.84	90.78		
		800		24.76	5.41	29.11	1.10	60.38		30.17	4.53	34.70	71.38	10.71	82.09		
		200		81.04	24.56	32.66	1.30	139.56		105.60	15.84	121.43	150.56	22.58	173.14		
		300		60.04	16.37	32.66	1.30	110.37		76.41	11.46	87.87	121.37	18.21	139.57		
300-349 HP	188900	400	46	48.58	12.28	32.66	1.30	94.82		60.86	9.13	69.99	105.82	15.87	121.69		
		600	(D)	34.64	8.19	32.66	1.30	76.79	11.00	42.83	6.42	49.25	87.79	13.17	100.96		
		800		28.11	6.14	32.66	1.30	68.21		34.25	5.14	39.39	79.21	11.88	91.09		
		200		90.09	27.30	35.50	1.50	154.39		117.39	17.61	135.00	165.39	24.81	190.20		
		300		66.74	18.20	35.50	1.50	121.94		84.94	12.74	97.68	132.94	19.94	152.88		
350-399 HP	210000	400	50	54.01	13.65	35.50	1.50	104.66		67.66	10.15	77.80	115.66	17.35	133.00		
		600	(D)	38.51	9.10	35.50	1.50	84.61	11.00	47.61	7.14	54.75	95.61	14.34	109.95		
		800		31.25	6.83	35.50	1.50	75.08		38.08	5.71	43.79	86.08	12.91	98.99		
		200		98.54	29.86	39.76	1.65	169.81		128.40	19.26	147.66	180.81	27.12	207.93		
		300		73.00	19.91	39.76	1.65	134.32		92.91	13.94	106.85	145.32	21.80	167.12		
400-425 HP	229700	400	56	59.07	14.93	39.76	1.65	115.41		74.00	11.10	85.10	126.41	18.96	145.37		
		600	(D)	42.12	9.95	39.76	1.65	93.49	11.00	52.08	7.81	59.89	104.49	15.67	120.16		
		800		34.19	7.47	39.76	1.65	83.06		41.65	6.25	47.90	94.06	14.11	108.17		
		200		114.11	34.58	46.15	1.80	196.64		148.69	22.30	171.00	207.64	31.15	238.79		
		300		84.54	23.05	46.15	1.80	155.54		107.59	16.14	123.73	166.54	24.98	191.52		
450-500 HP	266000	400	65	68.41	17.29	46.15	1.80	133.65		85.70	12.85	98.55	144.65	21.70	166.35		
		600	(D)	48.78	11.53	46.15	1.80	108.26	11.00	60.31	9.05	69.35	119.26	17.89	137.15		
		800		39.59	8.65	46.15	1.80	96.18		48.23	7.23	55.47	107.18	16.08	123.26		
		200		123.94	37.56	48.28	1.80	211.58		161.50	24.22	185.72	222.58	33.39	255.96		
		300		91.82	25.04	48.28	1.80	166.94		116.86	17.53	134.38	177.94	26.69	204.63		
500+ HP	288900	400	68	74.30	18.78	48.28	1.80	143.16		93.08	13.96	107.04	154.16	23.12	177.28		
		600	(D)	52.98	12.52	48.28	1.80	115.58	11.00	65.50	9.82	75.32	126.58	18.99	145.57		
		800		43.00	9.39	48.28	1.80	102.47		52.39	7.86	60.24	113.47	17.02	130.48		

POWERED EQUIPMENT

				MACHINE COMPONENT COSTS PER HOUR						MACHINE RENTAL PER HOUR			CUSTOM WORK RATES				
MACHINE SIZE	ORIG. COST	ANN. HOURS OF USE	FUEL TYPE AND LITRE /HOUR	FIXED COST $/HR.	REPAIR COST $/HR.	FUEL COST $/HR.	LUBE & OIL COST /HR.	TOTAL PER HR. COST NO LABOUR $/HR.	LAB. COST $/HR.	BASIC RENTAL COSTS $/HR.	MARGIN $/HR.	RENTAL RATE $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
3 TON		100	23	88.12	20.50	16.33	0.48	125.43		108.62	16.29	124.92	136.43	20.46	156.90		
SINGLE AXLE	82000	150	(D)	63.30	13.67	16.33	0.48	93.78	11.00	76.97	11.55	88.52	104.78	15.72	120.50		
DIESEL		200		50.27	10.25	16.33	0.48	77.33		60.52	9.08	69.60	88.33	13.25	101.58		
4 TON		100	27	110.69	25.75	19.17	1.00	156.61		136.44	20.47	156.91	167.61	25.14	192.75		
TANDEM	103000	150	(D)	79.52	17.17	19.17	1.00	116.85	11.00	96.68	14.50	111.19	127.85	19.18	147.03		
DIESEL		200		63.15	12.88	19.17	1.00	96.19		76.02	11.40	87.43	107.19	16.08	123.27		
3T and 4T trucks were priced with grain box, hoist and roll tarp See Appendix A for custom grain hauling for seeding and harvesting																	
TRUCKS		200	16	23.15	5.67	12.80	0.40	42.03		28.83	4.32	33.15	53.03	7.95	60.98		
PICK-UP	36600	250	(G)	19.15	4.54	12.80	0.40	36.89	11.00	23.69	3.55	27.24	47.89	7.18	55.07		
3/4 TON		300		16.54	3.78	12.80	0.40	33.52		20.32	3.05	23.37	44.52	6.68	51.20		
TRUCKS		100	18	50.83	11.83	12.78	0.48	75.92		62.66	9.40	72.06	86.92	13.04	99.95		
GRAIN	47300	150	(D)	36.52	7.88	12.78	0.48	57.66	11.00	44.40	6.66	51.06	68.66	10.30	78.96		
1 TON		200		29.00	5.91	12.78	0.48	48.17		34.91	5.24	40.15	59.17	8.88	68.05		
1T trucks were priced with cab and chassis only																	

DRAWN EQUIPMENT - GRAIN

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
AIR DISK DRILLS																$/AC
30-35 FT	126900	100	118.96	38.07	157.03	157.03	23.55	180.58	157.03			226.95	34.04	261.00		21.75
		150	85.28	25.38	110.66	110.66	16.60	127.26	110.66	58.93	11.00	180.58	27.09	207.67	12.0	17.31
		200	68.19	19.04	87.22	87.22	13.08	100.31	87.22	170 HP		157.15	23.57	180.72	AC/HR	15.06
36-40 FT	135600	100	127.11	40.68	167.79	167.79	25.17	192.96	167.79			243.65	36.55	280.20		20.76
		150	91.12	27.12	118.24	118.24	17.74	135.98	118.24	64.86	11.00	194.10	29.12	223.22	13.5	16.53
		200	72.86	20.34	93.20	93.20	13.98	107.18	93.20	185 HP		169.06	25.36	194.42	AC/HR	14.40
41-45 FT	145300	100	136.21	43.59	179.80	179.80	26.97	206.77	179.80			258.73	38.81	297.54		18.60
		150	97.64	29.06	126.70	126.70	19.01	145.71	126.70	67.94	11.00	205.64	30.85	236.48	16.0	14.78
		200	78.07	21.80	99.87	99.87	14.98	114.85	99.87	275 HP		178.81	26.82	205.63	AC/HR	12.85
					Average Rental Rate per Acre			9.93				Average Custom Rate per Acre				16.21
NOTE: Work rates may require adjustment for heavy straw conditions or high fertilizer rates																
AIR HOE DRILLS																
30-35 FT	90300	100	84.65	27.09	111.74	111.74	16.76	128.50	111.74			190.67	28.60	219.28		17.54
		150	60.68	18.06	78.74	78.74	11.81	90.55	78.74	67.94	11.00	157.68	23.65	181.33	12.5	14.51
		200	48.52	13.55	62.07	62.07	9.31	71.38	62.07	250 HP		141.00	21.15	162.15	AC/HR	12.97
36-40 FT	101900	100	95.52	30.57	126.09	126.09	18.91	145.01	126.09			205.03	30.75	235.78		16.84
		150	68.48	20.38	88.86	88.86	13.33	102.19	88.86	67.94	11.00	167.79	25.17	192.96	14.0	13.78
		200	54.75	15.29	70.04	70.04	10.51	80.55	70.04	275 HP		148.98	22.35	171.32	AC/HR	12.24
41-45 FT	119400	100	111.93	35.82	147.75	147.75	22.16	169.91	147.75			235.53	35.33	270.86		16.93
		150	80.24	23.88	104.12	104.12	15.62	119.73	104.12	76.79	11.00	191.90	28.79	220.69	16.0	13.79
		200	64.16	17.91	82.07	82.07	12.31	94.38	82.07	300 HP		169.85	25.48	195.33	AC/HR	12.21
46-50 FT	129500	100	121.39	38.85	160.24	160.24	24.04	184.28	160.24			248.03	37.20	285.24		15.85
		150	87.02	25.90	112.92	112.92	16.94	129.86	112.92	76.79	11.00	200.71	30.11	230.82	18.0	12.82
		200	69.58	19.43	89.01	89.01	13.35	102.36	89.01	350 HP		176.80	26.52	203.32	AC/HR	11.30
51-55 FT	145600	100	136.49	43.68	180.17	180.17	27.03	207.19	180.17			275.78	41.37	317.14		15.86
		150	97.84	29.12	126.96	126.96	19.04	146.01	126.96	84.61	11.00	222.57	33.39	255.96	20.0	12.80
		200	78.24	21.84	100.08	100.08	15.01	115.09	100.08	375 HP		195.69	29.35	225.04	AC/HR	11.25
56-60 FT	159100	100	149.14	47.73	196.87	196.87	29.53	226.40	196.87			301.36	45.20	346.56		17.33
		150	106.92	31.82	138.74	138.74	20.81	159.55	138.74	93.49	11.00	243.22	36.48	279.70	20.0	13.99
		200	85.49	23.87	109.35	109.35	16.40	125.76	109.35	425 HP		213.84	32.08	245.92	AC/HR	12.30
					Average Rental Rate per Acre			7.31				Average Custom Rate per Acre				13.61

NOTE: Work rates may require adjustment for heavy straw conditions or high fertilizer rates

*All airdrills have been priced with an air tank of varying capacity respective to the implement's seeding width.

DRAWN EQUIPMENT - GRAIN

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
AIR SEEDERS																
24-25 FT	69300	100	64.96	20.79	85.75	85.75	12.86	98.62	85.75			146.45	21.97	168.41		15.31
		150	46.57	13.86	60.43	60.43	9.06	69.49	60.43	49.69	11.00	121.12	18.17	139.29	11.0	12.66
		200	37.24	10.40	47.63	47.63	7.14	54.78	47.63	150 HP		108.32	16.25	124.57	AC/HR	11.32
28-30 FT	85600	100	80.24	25.68	105.92	105.92	15.89	121.81	105.92			175.85	26.38	202.23		14.98
		150	57.52	17.12	74.64	74.64	11.20	85.84	74.64	58.93	11.00	144.57	21.69	166.26	13.5	12.32
		200	46.00	12.84	58.84	58.84	8.83	67.66	58.84	170 HP		128.76	19.31	148.08	AC/HR	10.97
34-35 FT	88500	100	82.96	26.55	109.51	109.51	16.43	125.94	109.51			188.45	28.27	216.71		13.54
		150	59.47	17.70	77.17	77.17	11.58	88.75	77.17	67.94	11.00	156.11	23.42	179.52	16.0	11.22
		200	47.55	13.28	60.83	60.83	9.12	69.95	60.83	275 HP		139.76	20.96	160.73	AC/HR	10.05
40-41 FT	98400	100	92.24	29.52	121.76	121.76	18.26	140.03	121.76			200.70	30.10	230.80		12.48
		150	66.12	19.68	85.80	85.80	12.87	98.68	85.80	67.94	11.00	164.74	24.71	189.45	18.5	10.24
		200	52.87	14.76	67.63	67.63	10.15	77.78	67.63	275 HP		146.57	21.99	168.55	AC/HR	9.11
46-47 FT	116800	100	109.49	35.04	144.53	144.53	21.68	166.21	144.53			232.32	34.85	267.16		12.43
		150	78.49	23.36	101.85	101.85	15.28	117.13	101.85	76.79	11.00	189.64	28.45	218.08	21.5	10.14
		200	62.76	17.52	80.28	80.28	12.04	92.32	80.28	325 HP		168.07	25.21	193.28	AC/HR	8.99
50-55 FT	130600	100	122.43	39.18	161.61	161.61	24.24	185.85	161.61			266.09	39.91	306.00		12.75
		150	87.76	26.12	113.88	113.88	17.08	130.97	113.88	93.49	11.00	218.37	32.76	251.12	24.0	10.46
		200	70.18	19.59	89.77	89.77	13.46	103.23	89.77	400 HP		194.25	29.14	223.39	AC/HR	9.31
					Average Rental Rate per Acre			5.74						Average Custom Rate per Acre		11.17

Note: If equipped with mounted harrows add $0.60/AC
: If equipped with tow behind packers add $3.24/AC
*All airseeders have been priced with an air tank of varying capacity respective to the implement's seeding width.

ANHYDROUS AMMONIA APPLICATORS, 1600 GAL TANK & HD CULTIVATOR																
25 FT	48800	150	30.01	17.89	47.90	47.90	7.18	55.08	47.90			108.59	16.29	124.88		10.86
		250	19.68	10.74	30.41	30.41	4.56	34.97	30.41	49.69	11.00	91.10	13.67	104.77	11.5	9.11
		350	15.34	7.67	23.01	23.01	3.45	26.46	23.01	150 HP		83.70	12.56	96.26	AC/HR	8.37
36 FT	64500	150	39.66	23.65	63.31	63.31	9.50	72.80	63.31			142.24	21.34	163.58		9.91
		250	26.01	14.19	40.20	40.20	6.03	46.23	40.20	67.94	11.00	119.13	17.87	137.00	16.5	8.30
		350	20.28	10.14	30.41	30.41	4.56	34.97	30.41	250 HP		109.35	16.40	125.75	AC/HR	7.62
48 FT	78000	150	47.96	28.60	76.56	76.56	11.48	88.04	76.56			155.49	23.32	178.82		8.13
		250	31.45	17.16	48.61	48.61	7.29	55.90	48.61	67.94	11.00	127.55	19.13	146.68	22.0	6.67
		350	24.52	12.26	36.78	36.78	5.52	42.30	36.78	275 HP		115.71	17.36	133.07	AC/HR	6.05
					Average Rental Rate per Acre			2.79						Average Custom Rate per Acre		8.03

DRAWN EQUIPMENT - GRAIN

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
CULTIVATORS																
FIELD																$/AC
14-15 FT	16100	150	9.90	5.90	15.80	15.80	2.37	18.17	15.80			45.14	6.77	51.91		6.92
		250	6.49	3.54	10.03	10.03	1.51	11.54	10.03	18.33	11.00	39.37	5.90	45.27	7.5	6.04
		350	5.06	2.53	7.59	7.59	1.14	8.73	7.59	65 HP		36.92	5.54	42.46	AC/HR	5.66
20-21 FT	23400	150	14.39	8.58	22.97	22.97	3.45	26.41	22.97			58.68	8.80	67.48		6.75
		250	9.43	5.15	14.58	14.58	2.19	16.77	14.58	24.71	11.00	50.29	7.54	57.83	10.0	5.78
		350	7.36	3.68	11.03	11.03	1.66	12.69	11.03	85 HP		46.74	7.01	53.75	AC/HR	5.38
25-27FT	27000	150	16.60	9.90	26.50	26.50	3.98	30.48	26.50			72.51	10.88	83.39		6.18
		250	10.89	5.94	16.83	16.83	2.52	19.35	16.83	35.01	11.00	62.84	9.43	72.26	13.5	5.35
		350	8.49	4.24	12.73	12.73	1.91	14.64	12.73	110 HP		58.74	8.81	67.55	AC/HR	5.00
33-34 FT	33000	150	20.29	12.10	32.39	32.39	4.86	37.25	32.39			93.08	13.96	107.05		6.49
		250	13.31	7.26	20.57	20.57	3.08	23.65	20.57	49.69	11.00	81.26	12.19	93.45	16.5	5.66
		350	10.37	5.19	15.56	15.56	2.33	17.89	15.56	150 HP		76.25	11.44	87.69	AC/HR	5.31
41-45 FT	43300	150	26.62	15.88	42.50	42.50	6.37	48.87	42.50			118.36	17.75	136.11		6.33
		250	17.46	9.53	26.98	26.98	4.05	31.03	26.98	64.86	11.00	102.84	15.43	118.27	21.5	5.50
		350	13.61	6.80	20.42	20.42	3.06	23.48	20.42	180 HP		96.27	14.44	110.72	AC/HR	5.15
46-50 FT	47400	150	29.14	17.38	46.52	46.52	6.98	53.50	46.52			125.46	18.82	144.28		6.01
		250	19.11	10.43	29.54	29.54	4.43	33.97	29.54	67.94	11.00	108.48	16.27	124.75	24.0	5.20
		350	14.90	7.45	22.35	22.35	3.35	25.70	22.35	275 HP		101.29	15.19	116.48	AC/HR	4.85
51-55 FT	56900	150	34.99	20.86	55.85	55.85	8.38	64.23	55.85			143.64	21.55	165.18		6.23
		250	22.94	12.52	35.46	35.46	5.32	40.78	35.46	76.79	11.00	123.25	18.49	141.73	26.5	5.35
		350	17.89	8.94	26.83	26.83	4.02	30.85	26.83	325 HP		114.62	17.19	131.81	AC/HR	4.97
56-60 FT	59200	150	36.40	21.71	58.11	58.11	8.72	66.82	58.11			145.89	21.88	167.78		5.79
		250	23.87	13.02	36.89	36.89	5.53	42.43	36.89	76.79	11.00	124.68	18.70	143.38	29.0	4.94
		350	18.61	9.30	27.91	27.91	4.19	32.10	27.91	325 HP		115.70	17.36	133.06	AC/HR	4.59
					Average Rental Rate per Acre			1.49				Average Custom Rate per Acre				5.48

Note: If equipped with mounted harrows add $0.60/AC

DRAWN EQUIPMENT - GRAIN

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
CULTIVATORS HEAVY DUTY																$/AC
18-20 FT	22900	150	14.08	8.40	22.48	22.48	3.37	25.85	22.48			58.18	8.73	66.91		7.04
		250	9.23	5.04	14.27	14.27	2.14	16.41	14.27	24.71	11.00	49.98	7.50	57.48	9.5	6.05
		350	7.20	3.60	10.80	10.80	1.62	12.42	10.80	85 HP		46.51	6.98	53.48	AC/HR	5.63
21-22 FT	25500	150	15.68	9.35	25.03	25.03	3.75	28.78	25.03			71.04	10.66	81.69		7.43
		250	10.28	5.61	15.89	15.89	2.38	18.28	15.89	35.01	11.00	61.90	9.29	71.19	11.0	6.47
		350	8.02	4.01	12.02	12.02	1.80	13.83	12.02	110 HP		58.03	8.71	66.74	AC/HR	6.07
23-25 FT	25900	150	15.92	9.50	25.42	25.42	3.81	29.23	25.42			71.43	10.71	82.15		6.85
		250	10.44	5.70	16.14	16.14	2.42	18.56	16.14	35.01	11.00	62.15	9.32	71.47	12.0	5.96
		350	8.14	4.07	12.21	12.21	1.83	14.04	12.21	110 HP		58.22	8.73	66.96	AC/HR	5.58
27-29 FT	35000	150	21.52	12.83	34.35	34.35	5.15	39.51	34.35			86.67	13.00	99.67		7.38
		250	14.11	7.70	21.81	21.81	3.27	25.08	21.81	41.32	11.00	74.13	11.12	85.25	13.5	6.31
		350	11.00	5.50	16.50	16.50	2.48	18.98	16.50	130 HP		68.82	10.32	79.15	AC/HR	5.86
30-31 FT	37000	150	22.75	13.57	36.32	36.32	5.45	41.76	36.32			97.01	14.55	111.56		7.20
		250	14.92	8.14	23.06	23.06	3.46	26.52	23.06	49.69	11.00	83.75	12.56	96.31	15.5	6.21
		350	11.63	5.81	17.45	17.45	2.62	20.06	17.45	150 HP		78.14	11.72	89.86	AC/HR	5.80
32-33 FT	38600	150	23.73	14.15	37.89	37.89	5.68	43.57	37.89			98.58	14.79	113.37		6.87
		250	15.56	8.49	24.06	24.06	3.61	27.66	24.06	49.69	11.00	84.75	12.71	97.46	16.5	5.91
		350	12.13	6.07	18.20	18.20	2.73	20.93	18.20	150 HP		78.89	11.83	90.73	AC/HR	5.50
34-35 FT	39700	150	24.41	14.56	38.97	38.97	5.84	44.81	38.97			114.82	17.22	132.05		7.55
		250	16.01	8.73	24.74	24.74	3.71	28.45	24.74	64.86	11.00	100.60	15.09	115.69	17.5	6.61
		350	12.48	6.24	18.72	18.72	2.81	21.53	18.72	180 HP		94.58	14.19	108.76	AC/HR	6.22
36-37 FT	41000	150	25.21	15.03	40.24	40.24	6.04	46.28	40.24			119.18	17.88	137.06		7.41
		250	16.53	9.02	25.55	25.55	3.83	29.38	25.55	67.94	11.00	104.49	15.67	120.16	18.5	6.50
		350	12.89	6.44	19.33	19.33	2.90	22.23	19.33	250 HP		98.27	14.74	113.01	AC/HR	6.11
40-41 FT	43200	150	26.56	15.84	42.40	42.40	6.36	48.76	42.40			121.34	18.20	139.54		6.81
		250	17.42	9.50	26.92	26.92	4.04	30.96	26.92	67.94	11.00	105.86	15.88	121.74	20.5	5.94
		350	13.58	6.79	20.37	20.37	3.06	23.42	20.37	250 HP		99.31	14.90	114.20	AC/HR	5.57
45-47 FT	54300	150	33.39	19.91	53.30	53.30	7.99	61.29	53.30			132.23	19.83	152.07		6.61
		250	21.89	11.95	33.84	33.84	5.08	38.92	33.84	67.94	11.00	112.78	16.92	129.69	23.0	5.64
		350	17.07	8.53	25.60	25.60	3.84	29.44	25.60	275 HP		104.54	15.68	120.22	AC/HR	5.23
58-60 FT	62800	150	38.61	23.03	61.64	61.64	9.25	70.89	61.64			149.43	22.41	171.84		5.83
		250	25.32	13.82	39.14	39.14	5.87	45.01	39.14	76.79	11.00	126.92	19.04	145.96	29.5	4.95
		350	19.74	9.87	29.61	29.61	4.44	34.05	29.61	325 HP		117.40	17.61	135.01	AC/HR	4.58
					Average Rental Rate per Acre			1.65						Average Custom Rate per Acre		6.05

Note: If equipped with mounted harrows add $0.60/AC

DRAWN EQUIPMENT - GRAIN

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
DISKS, HEAVY BREAKING																$/AC
10-12 FT	23800	100	22.31	7.14	29.45	29.45	4.42	33.87	29.45			105.31	15.80	121.10		22.02
		150	15.99	4.76	20.75	20.75	3.11	23.87	20.75	64.86	11.00	96.61	14.49	111.10	5.5	20.20
		200	12.79	3.57	16.36	16.36	2.45	18.81	16.36	185 HP		92.22	13.83	106.05	AC/HR	19.28
14-16 FT	29700	100	27.84	8.91	36.75	36.75	5.51	42.26	36.75			112.61	16.89	129.50		17.27
		150	19.96	5.94	25.90	25.90	3.88	29.78	25.90	64.86	11.00	101.76	15.26	117.02	7.5	15.60
		200	15.96	4.46	20.41	20.41	3.06	23.48	20.41	185 HP		96.27	14.44	110.71	AC/HR	14.76
					Average Rental Rate per Acre			4.16				Average Custom Rate per Acre				17.90
DISKS, HEAVY TANDEM																$/AC
12-14 FT	11000	100	10.31	3.30	13.61	13.61	2.04	15.65	13.61			42.94	6.44	49.39		7.60
		150	7.39	2.20	9.59	9.59	1.44	11.03	9.59	18.33	11.00	38.92	5.84	44.76	6.5	6.89
		200	5.91	1.65	7.56	7.56	1.13	8.69	7.56	65 HP		36.89	5.53	42.43	AC/HR	6.53
15-17 FT	21800	100	20.44	6.54	26.98	26.98	4.05	31.02	26.98			62.68	9.40	72.09		9.01
		150	14.65	4.36	19.01	19.01	2.85	21.86	19.01	24.71	11.00	54.72	8.21	62.93	8.0	7.87
		200	11.71	3.27	14.98	14.98	2.25	17.23	14.98	85 HP		50.69	7.60	58.30	AC/HR	7.29
18-19 FT	24000	100	22.50	7.20	29.70	29.70	4.45	34.15	29.70			65.41	9.81	75.22		7.92
		150	16.13	4.80	20.93	20.93	3.14	24.07	20.93	24.71	11.00	56.64	8.50	65.13	9.5	6.86
		200	12.90	3.60	16.50	16.50	2.47	18.97	16.50	85 HP		52.20	7.83	60.03	AC/HR	6.32
20-22 FT	28800	100	27.00	8.64	35.64	35.64	5.35	40.98	35.64			96.33	14.45	110.78		10.55
		150	19.35	5.76	25.11	25.11	3.77	28.88	25.11	49.69	11.00	85.81	12.87	98.68	10.5	9.40
		200	15.48	4.32	19.80	19.80	2.97	22.76	19.80	150 HP		80.49	12.07	92.56	AC/HR	8.82
23-25 FT	35500	100	33.28	10.65	43.93	43.93	6.59	50.52	43.93			113.85	17.08	130.93		10.91
		150	23.86	7.10	30.96	30.96	4.64	35.60	30.96	58.93	11.00	100.88	15.13	116.02	12.0	9.67
		200	19.08	5.33	24.40	24.40	3.66	28.06	24.40	170 HP		94.33	14.15	108.48	AC/HR	9.04
26-28 FT	40100	100	37.59	12.03	49.62	49.62	7.44	57.06	49.62			125.48	18.82	144.30		10.69
		150	26.95	8.02	34.97	34.97	5.25	40.21	34.97	64.86	11.00	110.82	16.62	127.45	13.5	9.44
		200	21.55	6.02	27.56	27.56	4.13	31.70	27.56	185 HP		103.42	15.51	118.93	AC/HR	8.81
29-32 FT	43500	100	40 78	13.05	53.83	53.83	8.07	61.90	53.83			132.76	19.91	152.68		10.18
		150	29.23	8.70	37.93	37.93	5.69	43.62	37.93	67.94	11.00	116.87	17.53	134.40	15.0	8.96
		200	23.37	6.53	29.90	29.90	4.48	34.38	29.90	275 HP		108.83	16.33	125.16	AC/HR	8.34
					Average Rental Rate per Acre			2.65				Average Custom Rate per Acre				8.44
DRILLS DISK PRESS																$/AC
10 FT	12100	100	11.34	3.63	14.97	14.97	2.25	17.22	14.97			39.71	5.96	45.67		11.42
		150	8.13	2.42	10.55	10.55	1.58	12.13	10.55	13.74	11.00	35.29	5.29	40.58	4.0	10.15
		200	6.50	1.82	8.32	8.32	1.25	9.56	8.32	55 HP		33.05	4.96	38.01	AC/HR	9.50
20-21 FT	29200	100	27.37	8.76	36.13	36.13	5.42	41.55	36.13			82.14	12.32	94.46		11.11
		150	19.62	5.84	25.46	25.46	3.82	29.28	25.46	35.01	11.00	71.47	10.72	82.19	8.5	9.67
		200	15.69	4.38	20.07	20.07	3.01	23.08	20.07	110 HP		66.08	9.91	75.99	AC/HR	8.94
28-30 FT	46600	100	43.68	13.98	57.66	57.66	8.65	66.31	57.66			118.36	17.75	136.11		11.34
		150	31.32	9.32	40.64	40.64	6.10	46.73	40.64	49.69	11.00	101.33	15.20	116.53	12.0	9.71
		200	25.04	6.99	32.03	32.03	4.80	36.83	32.03	150 HP		92.72	13.91	106.63	AC/HR	8.89
40-42 FT	55500	100	52.03	16.65	68.68	68.68	10.30	78.98	68.68			144.53	21.68	166.21		9.78
		150	37.30	11.10	48.40	48.40	7.26	55.66	48.40	64.86	11.00	124.25	18.64	142.89	17.0	8.41
		200	29.82	8.33	38.15	38.15	5.72	43.87	38.15	185 HP		114.00	17.10	131.11	AC/HR	7.71
					Average Rental Rate per Acre			3.41				Average Custom Rate per Acre				9.48

NOTE: Work rates may require adjustment for heavy straw conditions or high fertilizer rates

DRAWN EQUIPMENT - GRAIN

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
DRILLS																
ZERO TILL GRAVITY DISK																
14 - 15 FT	44800	100	42.00	13.44	55.44	55.44	8.32	63.75	55.44			101.45	15.22	116.66		21.21
		150	30.11	8.96	39.07	39.07	5.86	44.93	39.07	35.01	11.00	85.08	12.76	97.84	5.5	17.79
		200	24.07	6.72	30.79	30.79	4.62	35.41	30.79	110 HP		76.80	11.52	88.32	AC/HR	16.06
21 FT	48100	100	45.09	14.43	59.52	59.52	8.93	68.45	59.52			120.21	18.03	138.24		17.28
		150	32.32	9.62	41.94	41.94	6.29	48.23	41.94	49.69	11.00	102.64	15.40	118.03	8.0	14.75
		200	25.85	7.22	33.06	33.06	4.96	38.02	33.06	150 HP		93.75	14.06	107.82	AC/HR	13.48
28 - 30 FT	69500	100	65.15	20.85	86.00	86.00	12.90	98.90	86.00			161.86	24.28	186.14		16.92
		150	46.70	13.90	60.60	60.60	9.09	69.69	60.60	64.86	11.00	136.46	20.47	156.93	11.0	14.27
		200	37.34	10.43	47.77	47.77	7.17	54.94	47.77	185 HP		123.63	18.54	142.17	AC/HR	12.92
					Average Rental Rate per Acre			6.84				Average Custom Rate per Acre				15.60
NOTE: Work rates may require adjustment for heavy straw conditions or high fertilizer rates																
FERTILIZER SPREADERS																$/AC
6 TON	13300	60	21.51	6.65	28.16	28.16	4.22	32.39	28.16			63.87	9.58	73.45		3.06
		80	16.76	4.99	21.75	21.75	3.26	25.01	21.75	24.71	11.00	57.45	8.62	66.07	24.0	2.75
		100	13.98	3.99	17.97	17.97	2.69	20.66	17.97	85 HP		53.67	8.05	61.73	AC/HR	2.57
					Average Rental Rate per Acre			1.04				Average Custom Rate per Acre				2.75
GRAIN AUGERS, PTO																$/BU
8 IN	4400	25	15.98	3.52	19.50	19.50	2.93	22.43	19.50			41.33	6.20	47.53		0.02
40-51 FT		50	8.87	1.76	10.63	10.63	1.59	12.22	10.63	10.83	11.00	32.46	4.87	37.33	3000.0	0.01
		75	6.46	1.17	7.63	7.63	1.14	8.77	7.63	35 HP		29.46	4.42	33.87	BU/HR	0.01
10 IN	8700	25	31.60	6.96	38.56	38.56	5.78	44.34	38.56			63.30	9.49	72.79		0.01
50-60 FT		50	17.54	3.48	21.02	21.02	3.15	24.17	21.02	13.74	11.00	45.76	6.86	52.62	6000.0	0.01
		75	12.76	2.32	15.08	15.08	2.26	17.35	15.08	55 HP		39.82	5.97	45.79	BU/HR	0.01
13 IN	13800	25	50.12	11.04	61.16	61.16	9.17	70.34	61.16			107.17	16.08	123.25		0.01
60-90 FT		50	27.82	5.52	33.34	33.34	5.00	38.34	33.34	35.01	11.00	79.35	11.90	91.25	9600.0	0.01
		75	20.25	3.68	23.93	23.93	3.59	27.51	23.93	105 HP		69.94	10.49	80.43	BU/HR	0.01
												Average Custom Rate / Bushel				0.01
GRAIN CONVEYORS, PTO																$/BU
15 IN BELT	9600	50	13.59	3.99	17.59	17.59	2.64	20.23	17.59			42.32	6.35	48.67		0.01
45-50 FT		100	7.37	2.00	9.37	9.37	1.41	10.78	9.37	13.74	11.00	34.11	5.12	39.22	6000.0	0.01
		150	5.35	1.33	6.69	6.69	1.00	7.69	6.69	55 HP		31.42	4.71	36.14	BU/HR	0.01
15 IN BELT	15600	50	22.09	6.49	28.58	28.58	4.29	32.87	28.58			53.32	8.00	61.31		0.01
60-65 FT		100	11.98	3.24	15.23	15.23	2.28	17.51	15.23	13.74	11.00	39.96	5.99	45.96	6000.0	0.01
		150	8.70	2.16	10.86	10.86	1.63	12.49	10.86	55 HP		35.60	5.34	40.94	BU/HR	0.01
15 IN BELT	17400	50	24.64	7.24	31.88	31.88	4.78	36.66	31.88			65.68	9.85	75.53		0.01
70-80 FT		100	13.36	3.62	16.98	16.98	2.55	19.53	16.98	22.80	11.00	50.78	7.62	58.40	6000.0	0.01
		150	9.70	2.41	12.12	12.12	1.82	13.93	12.12	75 HP		45.92	6.89	52.81	BU/HR	0.01
												Average Custom Rate / Bushel				0.01
GRAIN DRYERS- BATCH/CONTINUOUS																$/BU
300 BUS/HR	51100	50	92.80	12.78	105.57	105.57	15.84	121.41	105.57			167.89	25.18	193.07		0.64
17.5%-14.5%		100	51.51	6.39	57.90	57.90	8.68	66.58	57.90	51.32	11.00	120.21	18.03	138.25	300.0	0.46
		200	28.11	3.19	31.31	31.31	4.70	36.00	31.31	35 HP & propane & tank		93.62	14.04	107.67	BU/HR	0.36
					Suggested Rental Rate /Bu /1%			0.07				Suggested Custom Rate/Bushel / 1%				0.15
600 BUS/HR	71000	50	128.94	17.75	146.69	146.69	22.00	168.69	146.69			219.63	32.94	252.58		0.42
17.5%-14.5%		100	71.57	8.88	80.44	80.44	12.07	92.51	80.44	61.95	11.00	153.39	23.01	176.40	600.0	0.29
		200	39.06	4.44	43.50	43.50	6.52	50.02	43.50	35 HP & propane & tank		116.45	17.47	133.91	BU/HR	0.22
					Suggested Rental Rate /Bu /1%			0.05				Suggested Custom Rate/Bushel / 1%				0.10

NOTE: 300 bu dryer: Power unit costs incl. propane costs of (1) $37.92/hr(79 litres/hr x $.48/litre)(drying at 0 degrees Celsius) (2)Tank rental of $180.00/50hr =$2.57/hr (3) 35 HP tractor costs. Propane consumption will change with temperature (95 litres/hr at - 10 degrees Celsius, 126 litres/hr at - 20 degrees Celsius).

NOTE: 600 bu dryer: Power unit costs incl. propane costs of (1) $47.52/hr(99 litres/hr x $.48/litre)(drying at 0 degrees Celsius) (2)Tank rental of $180.00/50hr =$3.60/hr (3) 35 HP tractor costs. Propane consumption will change with temperature (111 litres/hr at - 10 degrees Celsius, 142 litres/hr at - 20 degrees Celsius).

NOTE: New grain dryers are powered by electric motors therefore substitute electrical costs for tractor costs.

DRAWN EQUIPMENT - GRAIN

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
GRAIN CARTS																
750 BU	29500	60	42.64	13.28	55.91	55.91	8.39	64.30	55.91			125.84	18.88	144.71		
		100	27.65	7.97	35.62	35.62	5.34	40.96	35.62	58.93	11.00	105.55	15.83	121.38		
		140	21.24	5.69	26.93	26.93	4.04	30.97	26.93	175 HP		96.86	14.53	111.38		
1100 BU	50000	60	72.27	22.50	94.77	94.77	14.21	108.98	94.77			173.70	26.06	199.76		
		100	46.87	13.50	60.37	60.37	9.06	69.43	60.37	67.94	11.00	139.31	20.90	160.20		
		140	36.00	9.64	45.64	45.64	6.85	52.49	45.64	250 HP		124.58	18.69	143.27		
GRAIN VACS																$/BU
1000-1499	12400	25	45.04	9.92	54.96	54.96	8.24	63.20	54.96			79.69	11.95	91.65		0.07
BUS/HR		50	25.00	4.96	29.96	29.96	4.49	34.45	29.96	13.74	11.00	54.70	8.20	62.90	1250.0	0.05
		75	18.19	3.31	21.50	21.50	3.22	24.72	21.50	50 HP		46.24	6.94	53.17	BU/HR	0.04
2000-3000	17300	25	62.83	13.84	76.67	76.67	11.50	88.17	76.67			110.48	16.57	127.05		0.05
BUS/HR		50	34.88	6.92	41.80	41.80	6.27	48.07	41.80	22.80	11.00	75.60	11.34	86.94	2500.0	0.03
		75	25.38	4.61	29.99	29.99	4.50	34.49	29.99	70 HP		63.80	9.57	73.36	BU/HR	0.03
4000	19500	25	70.82	15.60	86.42	86.42	12.96	99.39	86.42			125.90	18.88	144.78		0.04
BUS/HR		50	39.31	7.80	47.11	47.11	7.07	54.18	47.11	28.47	11.00	86.58	12.99	99.57	4000.0	0.02
		75	28.61	5.20	33.81	33.81	5.07	38.88	33.81	90 HP		73.28	10.99	84.27	BU/HR	0.02
					Average Rental Rate per Bushel			0.02				Average Custom Rate per Bushel				0.04
GRANULAR HERBICIDE APPLICATORS																
CULTIVATOR MOUNT																$/AC
UP TO 40 FT	7600	60	12.29	3.80	16.09	16.09	2.41	18.51	16.09			16.09	2.41	18.51		0.86
		80	9.58	2.85	12.43	12.43	1.86	14.29	12.43			12.43	1.86	14.29	21.5	0.66
		100	7.99	2.28	10.27	10.27	1.54	11.81	10.27			10.27	1.54	11.81	AC/HR	0.55
UP TO 60 FT	9400	60	15.20	4.70	19.90	19.90	2.99	22.89	19.90			19.90	2.99	22.89		0.79
		80	11.84	3.53	15.37	15.37	2.31	17.67	15.37			15.37	2.31	17.67	29.0	0.61
		100	9.88	2.82	12.70	12.70	1.90	14.60	12.70			12.70	1.90	14.60	AC/HR	0.50
Trailer Type	15300	60	24.75	7.65	32.40	32.40	4.86	37.26	32.40			68.11	10.22	78.32		1.96
40 TO 50 FT		80	19.28	5.74	25.02	25.02	3.75	28.77	25.02	24.71	11.00	60.72	9.11	69.83	40.0	1.75
		100	16.08	4.59	20.67	20.67	3.10	23.77	20.67	85 HP		56.38	8.46	64.83	AC/HR	1.62
					Average Rental Rate per Acre			0.66				Average Custom Rate per Acre				1.01

DRAWN EQUIPMENT - GRAIN

MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	MACHINE COSTS PER HOUR: FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	MACHINE RENTAL PER HOUR: BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	CUSTOM WORK RATES: TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
HARROWS, STANDARD																
5 BAR TINE																$/AC
40 FT	8700	60	12.57	3.92	16.49	16.49	2.47	18.96	16.49			52.20	7.83	60.03		3.00
		100	8.16	2.35	10.50	10.50	1.58	12.08	10.50	24.71	11.00	46.21	6.93	53.14	20.0	2.66
		140	6.26	1.68	7.94	7.94	1.19	9.13	7.94	85 HP		43.65	6.55	50.20	AC/HR	2.51
50 FT	11900	60	17.20	5.36	22.55	22.55	3.38	25.94	22.55			68.56	10.28	78.85		3.15
		100	11.16	3.21	14.37	14.37	2.16	16.52	14.37	35.01	11.00	60.38	9.06	69.43	25.0	2.78
		140	8.57	2.30	10.86	10.86	1.63	12.49	10.86	110 HP		56.87	8.53	65.40	AC/HR	2.62
60 FT	13000	60	18.79	5.85	24.64	24.64	3.70	28.33	24.64			76.96	11.54	88.50		2.95
		100	12.19	3.51	15.70	15.70	2.35	18.05	15.70	41.32	11.00	68.02	10.20	78.22	30.0	2.61
		140	9.36	2.51	11.87	11.87	1.78	13.65	11.87	130 HP		64.19	9.63	73.81	AC/HR	2.46
80 FT	16500	60	23.85	7.43	31.27	31.27	4.69	35.96	31.27			91.97	13.79	105.76		2.64
		100	15.47	4.46	19.92	19.92	2.99	22.91	19.92	49.69	11.00	80.62	12.09	92.71	40.0	2.32
		140	11.88	3.18	15.06	15.06	2.26	17.32	15.06	150 HP		75.75	11.36	87.12	AC/HR	2.18
					Average Rental Rate per Acre			0.61				Average Custom Rate per Acre				2.59
HARROWS, HEAVY																
50 FT	28400	60	41.05	12.78	53.83	53.83	8.07	61.90	53.83			129.68	19.45	149.14		2.98
		100	26.62	7.67	34.29	34.29	5.14	39.43	34.29	64.86	11.00	110.15	16.52	126.67	50.0	2.53
		140	20.45	5.48	25.93	25.93	3.89	29.81	25.93	185 HP		101.78	15.27	117.05	AC/HR	2.34
70 FT	33800	60	48.85	15.21	64.06	64.06	9.61	73.67	64.06			143.00	21.45	164.45		2.35
		100	31.68	9.13	40.81	40.81	6.12	46.93	40.81	67.94	11.00	119.75	17.96	137.71	70.0	1.97
		140	24.34	6.52	30.85	30.85	4.63	35.48	30.85	275 HP		109.79	16.47	126.26	AC/HR	1.80
80 FT	37500	60	54.20	16.88	71.07	71.07	10.66	81.74	71.07			150.01	22.50	172.51		2.16
		100	35.15	10.13	45.28	45.28	6.79	52.07	45.28	67.94	11.00	124.21	18.63	142.85	80.0	1.79
		140	27.00	7.23	34.23	34.23	5.13	39.37	34.23	275 HP		113.17	16.98	130.14	AC/HR	1.63
					Average Rental Rate per Acre			0.70				Average Custom Rate per Acre				2.10
HARROW PACKERS																$/AC
30 FT	27000	60	39.02	12.15	51.17	51.17	7.68	58.85	51.17			97.18	14.58	111.76		7.45
		100	25.31	7.29	32.60	32.60	4.89	37.49	32.60	35.01	11.00	78.61	11.79	90.40	15.0	6.03
		140	19.44	5.21	24.65	24.65	3.70	28.34	24.65	110 HP		70.66	10.60	81.26	AC/HR	5.42
50 FT	30900	60	44.66	13.91	58.56	58.56	8.78	67.35	58.56			110.88	16.63	127.52		5.10
		100	28.97	8.34	37.31	37.31	5.60	42.91	37.31	41.32	11.00	89.63	13.44	103.07	25.0	4.12
		140	22.25	5.96	28.21	28.21	4.23	32.44	28.21	130 HP		80.53	12.08	92.61	AC/HR	3.70
60 FT	34100	60	49.28	15.35	64.63	64.63	9.69	74.32	64.63			134.56	20.18	154.74		5.16
		100	31.97	9.21	41.17	41.17	6.18	47.35	41.17	58.93	11.00	111.10	16.66	127.76	30.0	4.26
		140	24.55	6.58	31.13	31.13	4.67	35.80	31.13	170 HP		101.06	15.16	116.21	AC/HR	3.87
70 FT	39200	60	56.66	17.64	74.30	74.30	11.14	85.44	74.30			144.22	21.63	165.86		4.74
		100	36.75	10.58	47.33	47.33	7.10	54.43	47.33	58.93	11.00	117.26	17.59	134.85	35.0	3.85
		140	28.22	7.56	35.78	35.78	5.37	41.15	35.78	170 HP		105.71	15.86	121.57	AC/HR	3.47
80 FT	41400	60	59.84	18.63	78.47	78.47	11.77	90.24	78.47			154.32	23.15	177.47		4.44
		100	38.81	11.18	49.99	49.99	7.50	57.48	49.99	64.86	11.00	125.84	18.88	144.72	40.0	3.62
		140	29.81	7.98	37.79	37.79	5.67	43.46	37.79	185 HP		113.65	17.05	130.70	AC/HR	3.27
					Average Rental Rate per Acre			1.76				Average Custom Rate per Acre				4.38

DRAWN EQUIPMENT - GRAIN

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
LAND ROLLER																
40-49 FT	26900	60	38.88	12.11	50.98	50.98	7.65	58.63	50.98			103.30	15.50	118.80		5.40
		100	25.22	7.26	32.48	32.48	4.87	37.35	32.48	41.32	11.00	84.80	12.72	97.52	22.0	4.43
		140	19.37	5.19	24.56	24.56	3.68	28.24	24.56	130 HP		76.88	11.53	88.41	AC/HR	4.02
					Average Rental Rate per Acre			1.70				Average Custom Rate per Acre				4.43
PLOWS																$/AC
7.5 FT	16700	100	15.40	6.68	22.08	22.08	3.31	25.39	22.08			51.41	7.71	59.13		19.71
5-FURROW		150	11.22	4.45	15.68	15.68	2.35	18.03	15.68	18.33	11.00	45.01	6.75	51.76	3.0	17.25
		200	9.19	3.34	12.53	12.53	1.88	14.41	12.53	65 HP		41.86	6.28	48.14	AC/HR	16.05
9 FT	18600	100	17.15	7.44	24.59	24.59	3.69	28.28	24.59			64.07	9.61	73.68		21.05
6-FURROW		150	12.50	4.96	17.46	17.46	2.62	20.08	17.46	28.47	11.00	56.93	8.54	65.47	3.5	18.71
		200	10.23	3.72	13.95	13.95	2.09	16.05	13.95	95 HP		53.42	8.01	61.44	AC/HR	17.55
12 FT	31000	100	28.59	12.40	40.99	40.99	6.15	47.14	40.99			93.31	14.00	107.31		21.46
8-FURROW		150	20.83	8.27	29.10	29.10	4.36	33.46	29.10	41.32	11.00	81.42	12.21	93.63	5.0	18.73
		200	17.05	6.20	23.25	23.25	3.49	26.74	23.25	130 HP		75.57	11.34	86.91	AC/HR	17.38
18 FT	43100	100	39.75	17.24	56.99	56.99	8.55	65.54	56.99			126.92	19.04	145.95		20.85
12 FURROW		150	28.96	11.49	40.46	40.46	6.07	46.53	40.46	58.93	11.00	110.38	16.56	126.94	7.0	18.13
		200	23.71	8.62	32.33	32.33	4.85	37.18	32.33	170 HP		102.26	15.34	117.60	AC/HR	16.80
					Average Rental Rate per Acre			6.27				Average Custom Rate per Acre				18.20
ROCK PICKERS																
FORK TYPE	7000	60	14.31	2.92	17.22	17.22	2.58	19.81	17.22			41.96	6.29	48.25		
		80	11.45	2.19	13.63	13.63	2.04	15.68	13.63	13.74	11.00	38.37	5.76	44.12		
		100	9.86	1.75	11.61	11.61	1.74	13.35	11.61	55 HP		36.34	5.45	41.79		
3 PADDLE	14500	60	29.63	6.04	35.67	35.67	5.35	41.03	35.67			69.48	10.42	79.90		
HYDRAULIC		80	23.71	4.53	28.24	28.24	4.24	32.47	28.24	22.80	11.00	62.04	9.31	71.35		
		100	20.42	3.63	24.04	24.04	3.61	27.65	24.04	75 HP		57.84	8.68	66.52		
EXTRA	18500	60	37.81	7.71	45.52	45.52	6.83	52.34	45.52			79.32	11.90	91.21		
LARGE		80	30.25	5.78	36.03	36.03	5.40	41.43	36.03	22.80	11.00	69.83	10.47	80.30		
		100	26.05	4.63	30.67	30.67	4.60	35.27	30.67	75 HP		64.47	9.67	74.15		
ROCK RAKES																
12-14 FT	6700	60	13.69	2.79	16.48	16.48	2.47	18.96	16.48			45.82	6.87	52.69		
		80	10.95	2.09	13.05	13.05	1.96	15.01	13.05	18.33	11.00	42.38	6.36	48.74		
		100	9.43	1.68	11.11	11.11	1.67	12.77	11.11	65 HP		40.44	6.07	46.51		
20 FT	13800	60	28.20	5.75	33.95	33.95	5.09	39.05	33.95			63.28	9.49	72.78		
		80	22.56	4.31	26.88	26.88	4.03	30.91	26.88	18.33	11.00	56.21	8.43	64.64		
		100	19.43	3.45	22.88	22.88	3.43	26.31	22.88	65 HP		52.21	7.83	60.05		
ROCK PICKER-ROCK RAKE COMBINATION																
20-22 FT	20700	60	42.30	8.63	50.93	50.93	7.64	58.57	50.93			90.40	13.56	103.96		
HYDRAULIC		80	33.84	6.47	40.31	40.31	6.05	46.36	40.31	28.47	11.00	79.78	11.97	91.75		
		100	29.15	5.18	34.32	34.32	5.15	39.47	34.32	95 HP		73.79	11.07	84.86		

DRAWN EQUIPMENT - GRAIN

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
SPRAYERS																
PTO																$/AC
400-500 GAL	11500	30	35.35	11.88	47.24	47.24	7.09	54.32	47.24			76.57	11.49	88.06		3.26
60-70 FT		60	20.14	5.94	26.08	26.08	3.91	30.00	26.08	18.33	11.00	55.42	8.31	63.73	27.0	2.36
		120	12.12	2.97	15.10	15.10	2.26	17.36	15.10	65 HP		44.43	6.66	51.09	AC/HR	1.89
700-800 GAL	30700	30	94.38	31.72	126.10	126.10	18.92	145.02	126.10			161.81	24.27	186.08		5.32
80-90 FT		60	53.77	15.86	69.63	69.63	10.44	80.08	69.63	24.71	11.00	105.34	15.80	121.14	35.0	3.46
		120	32.37	7.93	40.30	40.30	6.04	46.34	40.30	85 HP		76.01	11.40	87.41	AC/HR	2.50
700-800 GAL	38000	30	116.82	39.27	156.09	156.09	23.41	179.50	156.09			202.10	30.31	232.41		5.67
91-105 FT		60	66.55	19.63	86.19	86.19	12.93	99.12	86.19	35.01	11.00	132.20	19.83	152.03	41.0	3.71
		120	40.06	9.82	49.88	49.88	7.48	57.36	49.88	110 HP		95.89	14.38	110.27	AC/HR	2.69
1250 GAL	46000	30	141.42	47.53	188.95	188.95	28.34	217.29	188.95			241.27	36.19	277.46		5.24
100-110 FT		60	80.57	23.77	104.33	104.33	15.65	119.98	104.33	41.32	11.00	156.65	23.50	180.15	53.0	3.40
		120	48.50	11.88	60.38	60.38	9.06	69.44	60.38	130 HP		112.70	16.91	129.61	AC/HR	2.45
					Average Rental Rate per Acre			2.02				Average Custom Rate per Acre				3.23
NOTE: Cost of foam ranges from $.03-$.25/ac.																
For the cost of hauling water to the field add $0.55/acre (assumes 7.5 gal/ac., 12 mile haul & $5.00/1200 gal water cost). See Appendix A.																
For the cost of hauling water to the field add $0.82/acre if the water truck driver is paid for waiting time.																
SWATHERS PT																
STANDARD																$/AC
20-21 FT	21000	60	32.28	10.15	42.43	42.43	6.36	48.79	42.43			67.17	10.08	77.24		8.13
		100	21.17	6.09	27.26	27.26	4.09	31.35	27.26	13.74	11.00	51.99	7.80	59.79	9.5	6.29
		140	16.50	4.35	20.85	20.85	3.13	23.98	20.85	55 HP		45.59	6.84	52.43	AC/HR	5.52
24-25 FT	23000	60	35.35	11.12	46.47	46.47	6.97	53.44	46.47			71.21	10.68	81.89		7.12
		100	23.18	6.67	29.85	29.85	4.48	34.33	29.85	13.74	11.00	54.59	8.19	62.78	11.5	5.46
		140	18.08	4.76	22.84	22.84	3.43	26.27	22.84	55 HP		47.58	7.14	54.71	AC/HR	4.76
30 FT	25900	60	39.81	12.52	52.33	52.33	7.85	60.18	52.33			81.66	12.25	93.91		6.71
		100	26.11	7.51	33.62	33.62	5.04	38.66	33.62	18.33	11.00	62.95	9.44	72.39	14.0	5.17
		140	20.36	5.37	25.72	25.72	3.86	29.58	25.72	65 HP		55.05	8.26	63.31	AC/HR	4.52
36 FT	29200	60	44.88	14.11	59.00	59.00	8.85	67.85	59.00			92.80	13.92	106.72		6.47
		100	29.43	8.47	37.90	37.90	5.69	43.59	37.90	22.80	11.00	71.70	10.76	82.46	16.5	5.00
		140	22.95	6.05	29.00	29.00	4.35	33.35	29.00	75 HP		62.80	9.42	72.22	AC/HR	4.38
					Average Rental Rate per Acre			2.92				Average Custom Rate per Acre				5.48
SWATH ROLLER																
8 FT	1200	60	1.84	0.30	2.14	2.14	0.32	2.47	2.14			2.14	0.32	2.47		0.19
		100	1.21	0.18	1.39	1.39	0.21	1.60	1.39			1.39	0.21	1.60	13.0	0.12
		140	0.94	0.13	1.07	1.07	0.16	1.23	1.07			1.07	0.16	1.23	AC/HR	0.09
10 FT	1500	60	2.31	0.38	2.68	2.68	0.40	3.08	2.68			2.68	0.40	3.08		0.24
		100	1.51	0.23	1.74	1.74	0.26	2.00	1.74			1.74	0.26	2.00	13.0	0.15
		140	1.18	0.16	1.34	1.34	0.20	1.54	1.34			1.34	0.20	1.54	AC/HR	0.12
					Average Rental Rate per Hour			1.80				Average Custom Rate per Acre				0.12

DRAWN EQUIPMENT- LIVESTOCK AND FORAGE

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
BALE MOVERS LARGE ROUND																
7-8 BALES	15100	40	38.83	9.44	48.27	48.27	7.24	55.51	48.27			77.60	11.64	89.24		
		80	21.86	4.72	26.58	26.58	3.99	30.56	26.58	18.33	11.00	55.91	8.39	64.30		
		120	15.92	3.15	19.07	19.07	2.86	21.93	19.07	65 HP		48.40	7.26	55.66		
14-16 BALES	26900	40	69.18	16.81	85.99	85.99	12.90	98.89	85.99			132.00	19.80	151.80		
		80	38.94	8.41	47.34	47.34	7.10	54.45	47.34	35.01	11.00	93.35	14.00	107.36		
		120	28.36	5.60	33.96	33.96	5.09	39.06	33.96	110 HP		79.97	12.00	91.97		
BALE PROCESSORS																
4X5 FT TO	20900	100	24.20	6.69	30.89	30.89	4.63	35.52	30.89			83.21	12.48	95.69		
6X6 FT		200	13.67	3.34	17.01	17.01	2.55	19.56	17.01	41.32	11.00	69.33	10.40	79.73		
		300	10.22	2.23	12.45	12.45	1.87	14.32	12.45	130 HP		64.77	9.72	74.48		
BALERS, LARGE ROUND (excluding twine)																$/BALE
UNDER	18600	30	63.78	9.30	73.08	73.08	10.96	84.04	73.08			102.41	15.36	117.77		6.93
55 cu. ft.		60	35.90	4.65	40.55	40.55	6.08	46.63	40.55	18.33	11.00	69.88	10.48	80.36	17.0	4.73
4X4 FT		90	26.15	3.10	29.25	29.25	4.39	33.63	29.25	65 HP		58.58	8.79	67.37	BLS/HR	3.96
55-89 cu ft	25300	30	86.75	12.65	99.40	99.40	14.91	114.31	99.40			133.20	19.98	153.18		10.21
4X5 FT		60	48.83	6.33	55.15	55.15	8.27	63.43	55.15	22.80	11.00	88.96	13.34	102.30	15.0	6.82
or 4X6 FT		90	35.56	4.22	39.78	39.78	5.97	45.75	39.78	75 HP		73.58	11.04	84.62	BLS/HR	5.64
90-124 cuft	33500	30	114.87	16.75	131.62	131.62	19.74	151.36	131.62			167.33	25.10	192.43		16.04
5X6 FT		60	64.66	8.38	73.03	73.03	10.95	83.98	73.03	24.71	11.00	108.74	16.31	125.05	12.0	10.42
		90	47.09	5.58	52.67	52.67	7.90	60.58	52.67	85 HP		88.36	13.26	101.64	BLS/HR	8.47
Note: For the cost of twine add $.27/bale for 4' diameter, $.41/bale for 5' diameter and $.76/bale for 6' diameter																
NOTE: For the mesh wrap option, add $5600 for the additional capital cost. For the cost of mesh add $1.25/bale on average.																
BALERS, STANDARD (excluding twine) (bale chamber, width X height)																$/BALE
LESS 2 SQFT	21300	40	61.66	10.65	72.31	72.31	10.85	83.16	72.31			101.65	15.25	116.89		0.67
(14x18 inch)		80	34.83	5.33	40.15	40.15	6.02	46.17	40.15	18.33	11.00	69.48	10.42	79.91	175.0	0.46
		120	26.04	3.55	29.59	29.59	4.44	34.02	29.59	65 HP		58.92	8.84	67.76	BLS/HR	0.39
2 - 4 SQ FT	31900	40	92.35	15.95	108.30	108.30	16.25	124.55	108.30			144.01	21.60	165.61		0.95
(16x18 inch)		80	52.16	7.98	60.13	60.13	9.02	69.15	60.13	24.71	11.00	95.84	14.38	110.22	175.0	0.63
		120	38.99	5.32	44.31	44.31	6.65	50.96	44.31	85 HP		80.02	12.00	92.02	BLS/HR	0.53
Note: For the cost of twine add $.05/bale																
BALERS, LARGE RECTANGULAR (excluding twine) (bale chamber, width X height)																$/BALE
MEDIUM	88500	40	256.21	44.25	300.46	300.46	45.07	345.53	300.46			376.31	56.45	432.76		10.82
(35"x31"X98")		80	144.70	22.13	166.82	166.82	25.02	191.85	166.82	64.86	11.00	242.68	36.40	279.08	40.0	6.98
		120	108.18	14.75	122.93	122.93	18.44	141.37	122.93	180 HP		198.79	29.82	228.60	BLS/HR	5.72
LARGE	106200	40	307.45	53.10	360.55	360.55	54.08	414.63	360.55			436.41	65.46	501.87		12.55
(35"x47"X98")		80	173.64	26.55	200.19	200.19	30.03	230.22	200.19	64.86	11.00	276.04	41.41	317.45	40.0	7.94
		120	129.81	17.70	147.51	147.51	22.13	169.64	147.51	180 HP		223.37	33.51	256.88	BLS/HR	6.42
Note: For the cost of twine add $.76/bale																
BALE WAGONS PULL TYPE																$/BALE
83 BALE	28900	60	44.42	13.97	58.39	58.39	8.76	8.76	58.39			87.72	13.16	100.88		0.72
		100	29.13	8.38	37.51	37.51	5.63	43.14	37.51	18.33	11.00	66.84	10.03	76.87	140.0	0.55
		140	22.71	5.99	28.70	28.70	4.30	33.00	28.70	65 HP		58.03	8.70	66.74	BLS/HR	0.48
104 BALE	45900	60	70.55	22.19	92.74	92.74	13.91	106.65	92.74			128.45	19.27	147.72		0.71
		100	46.27	13.31	59.58	59.58	8.94	68.51	59.58	24.71	11.00	95.29	14.29	109.58	208.0	0.53
		140	36.07	9.51	45.58	45.58	6.84	52.42	45.58	85 HP		81.29	12.19	93.48	BLS/HR	0.45
					Average Rental Rate per Bale			0.32				Average Custom Rate per Bale				0.54

NOTE: The smaller sized bale wagons are not currently being manufactured. The above price is the last available (2002).

DRAWN EQUIPMENT- LIVESTOCK AND FORAGE

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
FORAGE HARVESTERS																
PULL TYPE																
SMALL	30900	40	79.47	19.31	98.78	98.78	14.82	113.60	98.78			151.10	22.66	173.76		
		80	44.73	9.66	54.38	54.38	8.16	62.54	54.38	41.32	11.00	106.70	16.01	122.71		
		120	32.58	6.44	39.01	39.01	5.85	44.87	39.01	130 HP		91.33	13.70	105.03		
MEDIUM	38300	40	98.50	23.94	122.43	122.43	18.37	140.80	122.43			183.13	27.47	210.60		
		80	55.44	11.97	67.41	67.41	10.11	77.52	67.41	49.69	11.00	128.10	19.22	147.32		
		120	40.38	7.98	48.36	48.36	7.25	55.61	48.36	150 HP		109.05	16.36	125.41		
LARGE	45300	40	116.50	28.31	144.81	144.81	21.72	166.53	144.81			214.74	32.21	246.95		
		80	65.57	14.16	79.73	79.73	11.96	91.69	79.73	58.93	11.00	149.65	22.45	172.10		
		120	47.76	9.44	57.20	57.20	8.58	65.78	57.20	170 HP		127.12	19.07	146.19		
GRINDER MIXERS																
300-400 BU	26400	100	29.78	8.45	38.23	38.23	5.73	43.96	38.23			73.94	11.09	85.03		
		200	17.27	4.22	21.49	21.49	3.22	24.71	21.49	24.71	11.00	57.20	8.58	65.78		
		300	12.91	2.82	15.72	15.72	2.36	18.08	15.72	85 HP		51.43	7.71	59.15		
500-600 BU	29200	100	32.94	9.34	42.28	42.28	6.34	48.62	42.28			88.29	13.24	101.54		
		200	19.10	4.67	23.77	23.77	3.57	27.33	23.77	35.01	11.00	69.78	10.47	80.25		
		300	14.28	3.11	17.39	17.39	2.61	20.00	17.39	110 HP		63.40	9.51	72.91		
HAY RAKES																$/AC
8.5 FT	6800	50	14.96	2.72	17.68	17.68	2.65	20.34	17.68			39.51	5.93	45.44		10.10
PARALLEL		70	11.25	1.94	13.19	13.19	1.98	15.17	13.19	10.83	11.00	35.02	5.25	40.27	4.5	8.95
BAR		90	9.26	1.51	10.78	10.78	1.62	12.39	10.78	35 HP		32.60	4.89	37.49	AC/HR	8.33
9.5 FT	7900	50	17.38	3.16	20.54	20.54	3.08	23.63	20.54			42.37	6.36	48.73		9.75
PARALLEL		70	13.07	2.26	15.33	15.33	2.30	17.62	15.33	10.83	11.00	37.15	5.57	42.73	5.0	8.55
BAR		90	10.76	1.76	12.52	12.52	1.88	14.40	12.52	35 HP		34.35	5.15	39.50	AC/HR	7.90
15 FT	7800	50	17.16	3.12	20.28	20.28	3.04	23.33	20.28			42.11	6.32	48.43		5.70
WHEEL		70	12.90	2.23	15.13	15.13	2.27	17.40	15.13	10.83	11.00	36.96	5.54	42.50	8.5	5.00
TYPE		90	10.63	1.73	12.36	12.36	1.85	14.21	12.36	35 HP		34.19	5.13	39.31	AC/HR	4.63
21 FT	10800	50	23.77	4.32	28.09	28.09	4.21	32.30	28.09			51.65	7.75	59.40		4.95
WHEEL		70	17.87	3.09	20.95	20.95	3.14	24.09	20.95	12.56	11.00	44.52	6.68	51.19	12.0	4.27
TWIN		90	14.71	2.40	17.11	17.11	2.57	19.68	17.11	45 HP		40.68	6.10	46.78	AC/HR	3.90
					Average Rental Rate per Acre			2.74				Average Custom Rate per Acre				6.89

DRAWN EQUIPMENT- LIVESTOCK AND FORAGE

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
MANURE SPREADERS																
70-139	11200	60	22.89	4.67	27.56	27.56	4.13	31.69	27.56			52.29	7.84	60.14		
CUBIC FT.		80	18.31	3.50	21.81	21.81	3.27	25.08	21.81	13.74	11.00	46.55	6.98	53.53		
LEVEL		100	15.77	2.80	18.57	18.57	2.79	21.36	18.57	55 HP		43.31	6.50	49.80		
140-199	13200	60	26.98	5.50	32.48	32.48	4.87	37.35	32.48			57.21	8.58	65.79		
CUBIC FT.		80	21.58	4.13	25.71	25.71	3.86	29.56	25.71	13.74	11.00	50.44	7.57	58.01		
LEVEL		100	18.59	3.30	21.89	21.89	3.28	25.17	21.89	55 HP		46.62	6.99	53.62		
200-249	15200	60	31.06	6.33	37.40	37.40	5.61	43.01	37.40			66.73	10.01	76.74		
CUBIC FT.		80	24.85	4.75	29.60	29.60	4.44	34.04	29.60	18.33	11.00	58.93	8.84	67.77		
LEVEL		100	21.40	3.80	25.20	25.20	3.78	28.98	25.20	65 HP		54.53	8.18	62.71		
250-350	16600	60	33.92	6.92	40.84	40.84	6.13	46.97	40.84			74.64	11.20	85.84		
CUBIC FT.		80	27.14	5.19	32.33	32.33	4.85	37.18	32.33	22.80	11.00	66.13	9.92	76.05		
LEVEL		100	23.37	4.15	27.52	27.52	4.13	31.65	27.52	75 HP		61.32	9.20	70.52		
MOWER CONDITIONERS: SICKLE																$/AC
9 FT	19000	50	41.81	9.50	51.31	51.31	7.70	59.01	51.31			74.88	11.23	86.11		19.13
		70	31.43	6.79	38.22	38.22	5.73	43.95	38.22	12.56	11.00	61.78	9.27	71.05	4.5	15.79
		90	25.89	5.28	31.16	31.16	4.67	35.84	31.16	45 HP		54.73	8.21	62.94	AC/HR	13.99
12 FT	30200	50	66.46	15.10	81.56	81.56	12.23	93.79	81.56			105.12	15.77	120.89		20.15
		70	49.96	10.79	60.75	60.75	9.11	69.86	60.75	12.56	11.00	84.31	12.65	96.96	6.0	16.16
		90	41.15	8.39	49.53	49.53	7.43	56.96	49.53	45 HP		73.10	10.96	84.06	AC/HR	14.01
14 FT	34700	50	76.36	17.35	93.71	93.71	14.06	107.77	93.71			118.45	17.77	136.22		19.46
		70	57.40	12.39	69.80	69.80	10.47	80.27	69.80	13.74	11.00	94.53	14.18	108.71	7.0	15.53
		90	47.28	9.64	56.92	56.92	8.54	65.45	56.92	55 HP		81.65	12.25	93.90	AC/HR	13.41
16 FT	36800	50	80.98	18.40	99.38	99.38	14.91	114.29	99.38			124.12	18.62	142.74		17.84
		70	60.88	13.14	74.02	74.02	11.10	85.12	74.02	13.74	11.00	98.76	14.81	113.57	8.0	14.20
		90	50.14	10.22	60.36	60.36	9.05	69.41	60.36	55 HP		85.10	12.76	97.86	AC/HR	12.23
					Average Rental Rate per Acre			10.88				Average Custom Rate per Acre				15.42
MOWER CONDITIONERS: DISC																$/AC
9 FT	19200	50	42.25	9.60	51.85	51.85	7.78	59.63	51.85			75.42	11.31	86.73		19.27
		70	31.76	6.86	38.62	38.62	5.79	44.41	38.62	12.56	11.00	62.18	9.33	71.51	4.5	15.89
		90	26.16	5.33	31.49	31.49	4.72	36.22	31.49	45 HP		55.06	8.26	63.31	AC/HR	14.07
12 FT	30400	50	66.90	15.20	82.10	82.10	12.31	94.41	82.10			105.66	15.85	121.51		20.25
		70	50.29	10.86	61.15	61.15	9.17	70.32	61.15	12.56	11.00	84.71	12.71	97.42	6.0	16.24
		90	41.42	8.44	49.86	49.86	7.48	57.34	49.86	45 HP		73.43	11.01	84.44	AC/HR	14.07
14 FT	43200	50	95.07	21.60	116.67	116.67	17.50	134.17	116.67			141.40	21.21	162.61		23.23
		70	71.47	15.43	86.89	86.89	13.03	99.93	86.89	13.74	11.00	111.63	16.74	128.38	7.0	18.34
		90	58.86	12.00	70.86	70.86	10.63	81.49	70.86	55 HP		95.59	14.34	109.93	AC/HR	15.70
					Average Rental Rate per Acre			11.95				Average Custom Rate per Acre				16.82

DRAWN EQUIPMENT- LIVESTOCK AND FORAGE

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
MOWERS																$/AC
SICKLE, TRAILING																
7 FT	8200	50	18.05	4.10	22.15	22.15	3.32	25.47	22.15			43.97	6.60	50.57		14.45
		70	13.57	2.93	16.49	16.49	2.47	18.97	16.49	10.83	11.00	38.32	5.75	44.07	3.50	12.59
		90	11.17	2.28	13.45	13.45	2.02	15.47	13.45	35 HP		35.28	5.29	40.57	AC/HR	11.59
9 FT	9200	50	20.25	4.60	24.85	24.85	3.73	28.57	24.85			46.67	7.00	53.67		11.93
		70	15.22	3.29	18.51	18.51	2.78	21.28	18.51	10.83	11.00	40.33	6.05	46.38	4.50	10.31
		90	12.53	2.56	15.09	15.09	2.26	17.35	15.09	35 HP		36.92	5.54	42.45	AC/HR	9.43
					Average Rental Rate per Acre			5.07						Average Custom Rate per Acre		11.45
POST POUNDERS																
350 LB	8300	80	12.72	1.76	14.49	14.49	2.17	16.66	14.49			39.22	5.88	45.11		
HAMMER		100	10.86	1.41	12.27	12.27	1.84	14.11	12.27	13.74	11.00	37.00	5.55	42.55		
		200	9.74	1.18	10.91	10.91	1.64	12.55	10.91	55 HP		35.65	5.35	41.00		
450 LB	9800	80	15.02	2.08	17.10	17.10	2.57	19.67	17.10			41.84	6.28	48.12		
HAMMER		100	12.82	1.67	14.48	14.48	2.17	16.66	14.48	13.74	11.00	39.22	5.88	45.10		
		200	11.50	1.39	12.89	12.89	1.93	14.82	12.89	55 HP		37.62	5.64	43.27		
ELK/BISON	11700	80	17.93	2.49	20.42	20.42	3.06	23.48	20.42			54.22	8.13	62.35		
1300 LB		100	15.30	1.99	17.29	17.29	2.59	19.89	17.29	22.80	11.00	51.09	7.66	58.76		
HAMMER		200	13.73	1.66	15.39	15.39	2.31	17.69	15.39	75 HP		49.19	7.38	56.56		
					Average Rental Rate per Hour			16.88								
ROTARY CUTTERS																
6 FT	6900	50	15.18	3.45	18.63	18.63	2.80	21.43	18.63			43.37	6.51	49.88		
3PH		70	11.41	2.46	13.88	13.88	2.08	15.96	13.88	13.74	11.00	38.62	5.79	44.41		
		90	9.40	1.92	11.32	11.32	1.70	13.02	11.32	55 HP		36.05	5.41	41.46		
6-7 FT HD	6900	50	15.18	3.45	18.63	18.63	2.80	21.43	18.63			43.37	6.51	49.88		
TRAILING		70	11.41	2.46	13.88	13.88	2.08	15.96	13.88	13.74	11.00	38.62	5.79	44.41		
		90	9.40	1.92	11.32	11.32	1.70	13.02	11.32	55 HP		36.05	5.41	41.46		
10 FT	14400	50	31.69	7.20	38.89	38.89	5.83	44.72	38.89			68.22	10.23	78.45		
TRAILING		70	23.82	5.14	28.96	28.96	4.34	33.31	28.96	18.33	11.00	58.30	8.74	67.04		
		90	19.62	4.00	23.62	23.62	3.54	27.16	23.62	65 HP		52.95	7.94	60.89		
15 FT	22800	50	50.17	11.40	61.57	61.57	9.24	70.81	61.57			95.38	14.31	109.68		
TRAILING		70	37.72	8.14	45.86	45.86	6.88	52.74	45.86	22.80	11.00	79.66	11.95	91.61		
		90	31.06	6.33	37.40	37.40	5.61	43.01	37.40	75 HP		71.20	10.68	81.88		
TRAILERS, LIVESTOCK																
16 FT	8900	100	9.56	1.78	11.34	11.34	1.70	13.05	11.34			59.23	8.88	68.12		
BUMPER		150	6.87	1.19	8.06	8.06	1.21	9.27	8.06	36.89	11.00	55.94	8.39	64.34		
		200	5.46	0.89	6.35	6.35	0.95	7.30	6.35	3/4 TON		54.23	8.14	62.37		
20 FT	11900	100	12.79	2.98	15.76	15.76	2.36	18.13	15.76			63.65	9.55	73.20		
GOOSENECK		150	9.19	1.79	10.97	10.97	1.65	12.62	10.97	36.89	11.00	58.86	8.83	67.69		
		200	7.30	1.28	8.57	8.57	1.29	9.86	8.57	3/4 TON		56.46	8.47	64.93		
TUB GRINDERS																
8 TON	34000	100	39.37	10.88	50.25	50.25	7.54	57.79	50.25			96.26	14.44	110.70		
		200	22.24	5.44	27.68	27.68	4.15	31.83	27.68	35.01	11.00	73.69	11.05	84.74		
		300	16.62	3.63	20.25	20.25	3.04	23.29	20.25	110 HP		66.26	9.94	76.20		
VERTICAL FEED MIXERS																
	42900	100	49.68	13.73	63.41	63.41	9.51	72.92	63.41			109.42	16.41	125.83		
400-560 CU FT		200	28.06	6.86	34.92	34.92	5.24	40.16	34.92	35.01	11.00	80.93	12.14	93.07		
		300	20.98	4.58	25.55	25.55	3.83	29.38	25.55	110 HP		71.56	10.73	82.30		
	63000	100	72.95	20.16	93.11	93.11	13.97	107.08	93.11			145.43	21.82	167.25		
600-1000 CU FT		200	41.20	10.08	51.28	51.28	7.69	58.97	51.28	41.32	11.00	103.60	15.54	119.14		
		300	30.80	6.72	37.52	37.52	5.63	43.15	37.52	130 HP		89.84	13.48	103.32		

DRAWN EQUIPMENT- MISCELLANEOUS

			MACHINE COSTS PER HOUR			MACHINE RENTAL PER HOUR			CUSTOM WORK RATES							
MACHINE SIZE	ORIG. COST	ANN. HRS. OF USE	FIXED COST $/HR.	REPAIR COST $/HR.	TOTAL COST NO LABOUR $/HR.	BASIC RENTAL COST $/HR.	MARGIN $/HR.	RENTAL RATE /HR.	TOTAL MACHINE COSTS $/HR.	POWER UNIT COST $/HR.	LAB. COST $/HR.	BASIC CUSTOM WORK RATES $/HR.	MARGIN $/HR.	CUSTOM RATE $/HR.	WORK RATE	CALC. CUSTOM RATE
FRONT-END LOADERS																
FOR 50-100	6900	80	8.37	1.73	10.10	10.10	1.51	11.61	10.10			43.90	6.58	50.48		
HP.TRACTOR		100	6.96	1.38	8.34	8.34	1.25	9.59	8.34	22.80	11.00	42.14	6.32	48.46		
W/BUCKET		120	6.04	1.15	7.19	7.19	1.08	8.27	7.19	75 HP		40.99	6.15	47.14		
FOR 70-140	9100	80	11.04	2.28	13.31	13.31	2.00	15.31	13.31			52.79	7.92	60.70		
HP.TRACTOR		100	9.17	1.82	10.99	10.99	1.65	12.64	10.99	28.47	11.00	50.46	7.57	58.03		
W/BUCKET		120	7.97	1.52	9.49	9.49	1.42	10.91	9.49	95 HP		48.96	7.34	56.30		
FOR 130 +	11900	80	14.44	2.98	17.41	17.41	2.61	20.02	17.41			78.10	11.72	89.82		
HP.TRACTOR		100	12.00	2.38	14.38	14.38	2.16	16.53	14.38	49.69	11.00	75.07	11.26	86.33		
W/BUCKET		120	10.42	1.98	12.40	12.40	1.86	14.26	12.40	150 HP		73.10	10.96	84.06		
SCRAPERS																
5.5-6.5	20900	60	42.71	8.71	51.42	51.42	7.71	59.13	51.42			112.11	16.82	128.93		
YARD		80	34.17	6.53	40.70	40.70	6.11	46.81	40.70	49.69	11.00	101.40	15.21	116.60		
		100	29.43	5.23	34.65	34.65	5.20	39.85	34.65	150 HP		95.34	14.30	109.65		
8.5 YARD	29300	60	59.88	12.21	72.09	72.09	10.81	82.90	72.09			142.01	21.30	163.32		
		80	47.91	9.16	57.06	57.06	8.56	65.62	57.06	58.93	11.00	126.99	19.05	146.04		
		100	41.25	7.33	48.58	48.58	7.29	55.87	48.58	170 HP		118.51	17.78	136.28		
SNOW BLOWERS																
FRONT	13900	20	63.11	13.21	76.31	76.31	11.45	87.76	76.31			115.78	17.37	133.15		
MOUNT		40	35.03	6.60	41.63	41.63	6.24	47.88	41.63	28.47	11.00	81.10	12.17	93.27		
8 FT		100	18.18	2.64	20.82	20.82	3.12	23.95	20.82	95 HP		60.29	9.04	69.34		
REAR	5300	20	24.06	5.04	29.10	29.10	4.36	33.46	29.10			58.43	8.76	67.19		
MOUNT		40	13.36	2.52	15.87	15.87	2.38	18.25	15.87	18.33	11.00	45.21	6.78	51.99		
7 FT		100	6.93	1.01	7.94	7.94	1.19	9.13	7.94	65 HP		37.27	5.59	42.86		
REAR	6400	20	29.06	6.08	35.14	35.14	5.27	40.41	35.14			64.47	9.67	74.14		
MOUNT		40	16.13	3.04	19.17	19.17	2.88	22.04	19.17	18.33	11.00	48.50	7.28	55.78		
8 FT		100	8.37	1.22	9.59	9.59	1.44	11.03	9.59	65 HP		38.92	5.84	44.76		

APPENDIX A

Custom Grain and Hay Hauling

A. Hauling Grain from the Farm to Market

a. Truck - 3 ton, 350 bushel: excluding labour costs $93.78 /hour
b. Auger - 7 inch, 40 ft, w/gas engine excluding labour costs $14.47 /hour
c. The labour rate is $11.00 /hour
d. Unload time: 10 minutes at elevator (truck engine and PTO running 5 minutes).

Distance in miles	3	6	9	12
Auger Costs per Load	$4.82	$4.82	$4.82	$4.82
Time in minutes	20	20	20	20
Truck Costs per Load	$26.57	$40.64	$54.71	$67.21
Time in minutes (incl. 5 min. unload time)	17	26	35	43
Labour Costs per Load	$7.70	$9.35	$11.00	$12.47
Total time in minutes	42	51	60	68
Total Cost per Load	$39.10	$54.81	$70.53	$84.50
Margin per Load (15%)	$5.86	$8.22	$10.58	$12.68
Custom Rate per Load (350 bu.)	$44.96	$63.03	$81.11	$97.18
Custom Rate per Bushel	$0.13	$0.18	$0.23	$0.28

The calculated custom rate is $0.13 /bushel for the first 3 miles plus $0.017 per bushel for each additional mile.
Note: This is for a three ton truck and will not be the same as for commercial trucking rates.

B. Hauling Seed to the Field

Assume
1. Seeding 160 acres with 30' air seeder (12 hours)
2. Three ton truck costs $93.78 /hour
3. Truck running time includes - loading 5 minutes equals 0.08 hours
   - driving to and from field 15 min. equals 0.25 hours
   - running time in field 12 hrs.X 20% equals 2.40 hours
   2.73 hours

The Truck Cost for 160 acres is $93.78 /hour X 2.73 hours equals $256.02
The Trucking Cost per acre is $256.02 /160 ac = $1.60 per acre.

If one truck is used for fertilizer and one truck is used for seed, then double the trucking cost per acre.

APPENDIX A

C. Hauling Grain from the Field to Yard

a. Truck - 3 ton, 350 bushel truck excluding labour costs — $93.78 /hour
b. Auger - 7 inch X 40' with gas engine excluding labour costs — $14.47 /hour
c. Labour rate — $11.00 /hour
d. Unload time: 11 minutes at bin (truck engine and PTO running)

(1) Time Use

Distance: Field to yard in miles	0.5	1	1.5	2	3	4
Travel Time to Yard and Return (min)	4	6.5	8.5	10	12	15
Total Unload Time at Bin (min)	11	11	11	11	11	11
Time truck running during unload (min)	5	5	5	5	5	5
Time unload twice from one combine or once from each of two combines (min)	10	10	10	10	10	10
Time per Trip Truck Running (min)	19	21.5	23.5	25	27	30
Waiting Time in Field (truck not running)						
(a) hauling from one combine (min)	47	44.5	42.5	41	39	36
(b) hauling from two combines (min)	11	8.5	6.5	5	3	0
Total Time per Trip						
(a) hauling from one combine (min)	72	72	72	72	72	72
(b) hauling from two combines (min)	36	36	36	36	36	36
(2) Component Costs per Trip						
(a) Truck Costs/Trip	$29.70	$33.60	$36.73	$39.08	$42.20	$46.89
(b) Auger Costs/Trip	$2.65	$2.65	$2.65	$2.65	$2.65	$2.65
(c) Labour Costs/Trip - one combine	$13.20	$13.20	$13.20	$13.20	$13.20	$13.20
(d) Labour Costs/Trip - two combines	$6.60	$6.60	$6.60	$6.60	$6.60	$6.60
(3) Custom Rate $/Hr.(incl. 15% margin)						
- hauling from one combine	$43.65	$47.40	$50.39	$52.64	$55.64	$60.13
- hauling from two combines	$74.65	$82.14	$88.14	$92.63	$98.62	$107.61
(4) Custom Rate $/Bus.(incl.15 % margin)						
- haul from one combine bu/hr = 300	$0.15	$0.16	$0.17	$0.18	$0.19	$0.20
- haul from two combines bu/hr= 600	$0.12	$0.14	$0.15	$0.15	$0.16	$0.18

The calculated custom rate for hauling from one combine is $0.16 for the first mile and $0.015 for each additional mile.

The calculated custom rate for hauling from two combines is $0.14 for the first mile and $0.015 for each additional mile.

APPENDIX A

D. Hauling Large Round Bales from Field to Yard

The following cost calculation of hauling large round bales from the field to the yard includes the cost of a large round bale mover, tractor and labour. The large round bale mover can pick up large round bales in the field, transport them to the yard and unload them automatically.

assume
a. 8 bale large round bale mover $ 64.30 /hour custom rate
b. 65 horsepower tractor
c. Two mile haul takes 30 minutes (4 miles round trip) (16 bales per hour)
d. Six mile haul takes 60 minutes (12 mile round trip) (8 bales per hour)

Cost per bale - two mile haul $\frac{\$ \ 64.30}{16} = \$ \ 4.02$

Cost per bale - six mile haul $\frac{\$ \ 64.30}{8} = \$ \ 8.04$

assume
a. 14 bale large round bale mover $ 107.36 /hour custom rate
b. 110 horsepower tractor
c. Two mile haul takes 40 minutes (4 miles round trip) (21 bales per hour)
d. Six mile haul takes 70 minutes (12 mile round trip) (12 bales per hour)

Cost per bale - two mile haul $\frac{\$ \ 107.36}{21} = \$ \ 5.11$

Cost per bale - six mile haul $\frac{\$ \ 107.36}{12} = \$ \ 8.95$

E. Hauling Water for Field Spraying - Cart Sprayer

	2.5gal/acre		5gal/acre		7.5gal/acre		10gal/acre	
	part time driver	full time driver	part time driver	full time driver	part time driver	full time driver	part time driver	full time driver
Assume								
ac sprayed per hr. avg. of 80' and 100' booms	42.0	42.0	40.0	40.0	38.0	38.0	36.0	36.0
labour cost/hr	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
3 ton truck cost per hour	93.78	93.78	93.78	93.78	93.78	93.78	93.78	93.78
truck hauls 1200 gal/load	1200	1200	1200	1200	1200	1200	1200	1200
acres per load = 1200 gal/(gal/ac)	480	480	240	240	160	160	120	120
hours per load = 1200gal/(gal/ac)/(ac/hr)	11.43	11.43	6.00	6.00	4.21	4.21	3.33	3.33
3 ton driving time going for water (min)	13.3	13.3	25.3	25.3	36.0	36.0	45.5	45.5
driving time in the field (min)	1.8	1.8	3.5	3.5	5.0	5.0	6.3	6.3
total time minutes per 160 acres (min) *	15.1	15.1	28.8	28.8	41.0	41.0	51.8	51.8
3 Ton cost for 160 acres	23.60	23.60	45.01	45.01	64.08	64.08	80.96	80.96
labour cost for 160 acres	2.77	125.71	5.28	66.00	7.52	46.32	9.50	36.67
3 Ton and labour cost for 160 acres	26.37	149.32	50.29	111.01	71.60	110.40	90.46	117.63
add 15% margin	3.96	22.40	7.54	16.65	10.74	16.56	13.57	17.64
total cost of hauling for 160 acres	30.33	171.71	57.84	127.67	82.34	126.96	104.03	135.28
cost of purchase or pumping water for 160 ac **	1.67	1.67	3.33	3.33	5.00	5.00	6.67	6.67
cost per 160 acres for hauling and water	31.99	173.38	61.17	131.00	87.34	131.96	110.70	141.94
cost per acre of water hauling	0.20	1.08	0.38	0.82	0.55	0.82	0.69	0.89

* based on one load taking 41 minutes
** based on one load costing $5.00

APPENDIX A

F. High Clearance Sprayer Transportation Costs

Assume:

1. 80 ft. sprayer does 800 ac/day; 90 ft. sprayer does 900 ac/day; 100 ft. sprayer does 1000 ac/day
2. 3 ton truck costs 120.50 $/hr
3. truck running time approx. 3 hrs/day
4. Trailer costs based on $12000 are 10.80 $/hr
5. 393.89 $/hr truck and trailer costs/ day
6. 80' sprayer 800 ac/day: $0.49 $/ac Transportation Costs
7. 90' sprayer 900 ac/day: $0.44 $/ac Transportation Costs
8. 100' sprayer 1000 ac/day: $0.39 $/ac Transportation Costs

Average: 0.44 $/ac Transportation Costs

Note: 3 ton truck costs include labour and margin

APPENDIX B

Self Propelled Combine Classification (Current Models)

SIZE	AC/HR	MANUFACTURER	MODEL
Class 5	<300hp/<250bu hopper 8-12 ac/hr	CNH	2377
		John Deere STS	9560
		John Deere	9560
		AgCo Gleaner	R55
Class 6	Up to 300hp/<300 bu hopper 10-15 ac/hr	CNH	2388
		NH	CR 940
		AgCo MF	9690
		AgCo Gleaner	R65
		John Deere STS	9660
		NH	CX 840
		AgCo Gleaner	C 62
		John Deere	9660
Class 7	>300hp/300 bu hopper 15-18 ac/hr	NH	CR 960
		AgCo MF	9790
		AgCo Gleaner	R75
		John Deere STS	9760
		NH	CX 860
Class 7+	>350hp/>300 bu hopper 20+ ac/hr	NH	CR 970
		NH	CX 880
		CNH	AFX 8010
		John Deere STS	9860

Self-Propelled High Clearance Sprayers Classification (Current Models)

There is no official standard for the classification of high clearance sprayers. However, the following is commonly used by the industry. It is based on the product tank size of the sprayer in U.S. gallons.

Class 1: 200 gallons – 499 gallons
Class 2: 500 gallons – 649 gallons
Class 3: 650 gallons – 899 gallons
Class 4: 900 gallons – 1200 gallons

APPENDIX C

Rental Rate Calculation Worksheet

Machine _____ Original Cash Cost $_____

Basic Rental Cost (Per Hour)

Fixed Costs: _____ x _____ = $_____/hr (A)
Rate/hr* Number of $1000 orig. cash cost

Repairs: _____ x _____ = $_____/hr (B)
Rate/hr* Number of $1000 orig. cash cost

Basic Rental Cost (A + B) = $_____/hr (C)

Rental Margin = _____ x _____ = $_____/hr (D)
Suggested rate 15% Basic Rental Costs (C)

Rental Rate Per Hour (C + D) = $_____/hr

* Refer to "Machinery Cost Calculation Guide" Appendix F, column D for fixed costs rate/hour, and column E for repair costs rate/hour.

APPENDIX D

Custom Rate Calculation Worksheet

Operation _____

Power Unit _____ Original Cash Cost $
Tractor, SP Machine

Machine _____ Original Cash Cost $
Tillage Implements, PTO Machine, Other

Power Unit Costs (Per Hour)

Fixed Costs _____ (Rate/hr*) x _____ (Number of $1000 Orig. cash cost) = $_____/hr (1)

Fuel _____ (Litre/hr) x _____ (Price/Litre) = $_____/hr (2)

Oil and Grease $.40 x _____ Hp / 100 Hp = $_____/hr (3)

Repairs** _____ (Rate/hr*) x _____ (Number of $1000 Orig. cash cost) = $_____/hr (4)

Total Costs of Power Unit (1+2+3+4) = $_____/hr (A)

Machine Costs (Per Hour)

Fixed Costs _____ (Rate/hr*) x _____ (Number of $1000 Orig. cash cost) = $_____/hr (5)

Repairs** _____ (Rate/hr*) x _____ (Number of $1000 Orig. cash cost) = $_____/hr (6)

Total Costs of Machinery (5+6) = $_____/hr (B)

Labour Cost Per Hour = $_____/hr (C)

Total Cost of Power Unit, Machine and Operator (A + B + C) = $_____/hr (D)

Margin Per Hour _____ (Suggested Rate 15%) x $_____/hr (D) = $_____/hr (E)

Custom Rate = Total Cost + Margin (D + E) = $_____/hr (F)

Work Rate (acres/hr)*** = $_____ac/hr (G)

Custom rate per acre*** (F/G) = $_____/acre

*Refer to "Machinery Cost Calculation Guide" Appendix F, Column D for fixed costs rate/hr, and column E for repair costs rate/hr.
** If you use less than original cash cost in the repair calculation you will be underestimating repair costs.
*** Where appropriate, substitute other units (bales, tons) for acres.

APPENDIX E

Formulas Used in Calculations

A. Fixed costs per hour are the sum of (i) Depreciation, (ii) Investment Costs, (iii) Insurance and Housing.

$$\text{i) Depreciation/hr} = \frac{\dfrac{\text{Original Cash Cost}^{*} - \text{Salvage Value}^{**}}{\text{Years Lifetime}}}{\text{Annual Hours Use}}$$

$$\text{ii) Investment Cost/hr} = \frac{\dfrac{\text{Original Cash Cost}^{*} + \text{Salvage Value}^{**}}{2} \times 5.6\%^{***}}{\text{Annual Hours Use}}$$

$$\text{iii) Insurance and Housing/hr} = \frac{\text{Original Cash Cost}^{*} \times 1\%}{\text{Annual Hours Use}}$$

The short cut method calculates fixed costs on an hourly basis per $1000 of original cost.

$$\frac{\text{Original Cash Cost}}{1000} \times \text{Applicable cost factor (from Appendix F, Column D)}$$

B. Repair costs are calculated on an hourly basis per $1,000 of original cost.

$$\frac{\text{Original Cash Cost}}{1000} \times \text{Applicable cost factor from Appendix F, Column E.}$$

C. Acres per hour

$$\text{Tillage Operations (82.5\% field efficiency)} = \frac{\text{Machine Width (ft)} \times \text{Speed (mph)}}{10}$$

$$\text{Seeding and Harvesting (69\% field efficiency)} = \frac{\text{Machine Width (ft)} \times \text{Speed (mph)}}{12}$$

* Original Cash Cost is the cash price you would pay for a new machine without a trade
** Salvage value is assumed to be 10% of Original Cash Cost
*** 5.6% interest rate assumes machine investment is 50% borrowed and 50% owned. Refer to p.i Assumptions #1.

APPENDIX F

Machinery Cost Calculation Guide

MACHINE	A ANNUAL USE HRS	B DEP'N LIFE YRS	C AVERAGE ANNUAL REPAIR RATE % ORIG. CASH COST	D FIXED COST/ HOUR/ $1000 ORIG. CASH COST	E REPAIR COST/ HOUR/ $1000 ORIG. CASH COST
AIR DISK DRILLS	100	17		0.9374	0.3000
AIR HOE DRILLS	150	15	3	0.6720	0.2000
AIR SEEDERS	200	13.5		0.5373	0.1500
BALE MOVERS	40	14.5		2.5717	0.6250
	80	12	2.5	1.4475	0.3125
	120	10.5		1.0543	0.2083
BALE PROCESSORS	100	12		1.1580	0.3200
	200	10	3.2	0.6540	0.1600
	300	8.5		0.4889	0.1067
BALE THROWERS	40	12		2.8950	0.5000
	80	10	2	1.6350	0.2500
	120	8.5		1.2224	0.1667
BALE WAGONS, PTO	60	17.5		1.5371	0.4833
	100	15	2.9	1.0080	0.2900
	140	13		0.7859	0.2071
BALE WAGONS, SP	60	17.5		1.5371	0.3333
	100	15	2	1.0080	0.2000
	140	13		0.7859	0.1429
BALERS, LARGE ROUND	30	14.5		3.4290	0.5000
	60	12	1.5	1.9300	0.2500
	90	10.5		1.4057	0.1667
BALERS, STANDARD	40	12		2.8950	0.5000
BALERS, LARGE	80	10	2	1.6350	0.2500
	120	8.5		1.2224	0.1667
COMBINES, PTO	120	13		0.9169	0.2667
	150	12	3.2	0.7720	0.2133
	180	11		0.6812	0.1778
	350	8.5		0.4191	0.0914
COMBINES, SP	120	13		0.9169	0.2667
	150	12	3.2	0.7720	0.2133
	180	11		0.6812	0.1778
	350	8.5		0.4191	0.0914
CULTIVATORS	150	17.5	CLAY-SAND	0.6149	0.3667
FIELD , H.D., WIDE BLADE	250	15	5.5	0.4032	0.2200
& ANHYDROUS AMMONIA	350	13	(3.0-8.0)	0.3144	0.1571
DISCERS &	100	17		0.9374	0.3000
DISKS, TANDEM	150	15	3	0.6720	0.2000
	200	13.5		0.5373	0.1500

APPENDIX F

Machinery Cost Calculation Guide

MACHINE	A ANNUAL USE HRS	B DEP'N LIFE YRS	C AVERAGE ANNUAL REPAIR RATE % ORIG. CASH COST	D FIXED COST/ HOUR/ $1000 ORIG. CASH COST	E REPAIR COST/ HOUR/ $1000 ORIG. CASH COST
DRILLS, SEED	100	17		0.9374	0.3000
DRILLS, ZERO TILL GRAVITY	150	15	3	0.6720	0.2000
	200	13.5		0.5373	0.1500
FERTILIZER SPREADERS	60	16		1.6175	0.5000
	80	15	3	1.2600	0.3750
	100	14		1.0509	0.3000
FORAGE HARVESTERS	40	14.5		2.5717	0.6250
	80	12	2.5	1.4475	0.3125
	120	10.5		1.0543	0.2083
FRONT END LOADERS	80	16		1.2131	0.2500
	100	15	2	1.0080	0.2000
	120	14		0.8757	0.1667
GRAIN AUGERS	25	18		3.6320	0.8000
GRAIN VACS	50	15	2	2.0160	0.4000
	75	13		1.4671	0.2667
	50	30		1.4160	0.4160
GRAIN CONVEYORS	100	25	2.08	0.7680	0.2080
	150	21		0.5577	0.1387
GRAIN DRYERS	100	18		0.9080	0.1250
BATCH	200	15	1.25	0.5040	0.0625
	300	13		0.3668	0.0417
GRAIN DRYERS	50	18		1.8160	0.2500
CONTINUOUS	100	15	1.25	1.0080	0.1250
	200	13		0.5502	0.0625
GRANULAR HERBICIDE	60	16		1.6175	0.5000
APPLICATORS	80	15	3	1.2600	0.3750
	100	14		1.0509	0.3000
GRINDER MIXERS	100	12.5		1.1280	0.3200
	200	10	3.2	0.6540	0.1600
	300	8.5		0.4889	0.1067
HARROWS, STANDARD	60	19.6		1.4453	0.4500
HARROWS, HEAVY	100	17	2.7	0.9374	0.2700
	140	15		0.7200	0.1929
HARROW PACKERS	60	19.6		1.4453	0.4500
	100	17	2.7	0.9374	0.2700
	140	15		0.7200	0.1929
HAY RAKES	50	13		2.2006	0.4000
	70	12	2	1.6543	0.2857
	90	11		1.3624	0.2222

APPENDIX F

Machinery Cost Calculation Guide

MACHINE	A ANNUAL USE HRS	B DEP'N LIFE YRS	C AVERAGE ANNUAL REPAIR RATE % ORIG. CASH COST	D FIXED COST/ HOUR/ $1000 ORIG. CASH COST	E REPAIR COST/ HOUR/ $1000 ORIG. CASH COST
HEADERS: PICKUP,	100	18		0.9080	0.2700
RIGID, FLEX, DRAPER	150	16		0.6470	0.1800
	200	15	2.7	0.5040	0.1350
	250	14		0.4203	0.1080
	300	13		0.3668	0.0900
LAND ROLLERS	60	19.6		1.4453	0.4500
GRAIN CARTS	100	17	2.7	0.9374	0.2700
	140	15		0.7200	0.1929
MANURE SPREADERS	60	11		2.0436	0.4167
	80	10	2.5	1.6350	0.3125
	100	9		1.4080	0.2500
MANURE SPREADERS	120	11		1.0218	0.2083
LIQUID	140	10	2.5	0.9343	0.1786
	160	9		0.8800	0.1563
MOWER CONDITIONER	50	13		2.2006	0.5000
DISC OR SICKLE	70	12	2.5	1.6543	0.3571
MOWERS	90	11		1.3624	0.2778
PLOWS	100	17.5		0.9223	0.4000
	150	15	4	0.6720	0.2667
	200	13		0.5502	0.2000
POST POUNDERS	80	11		1.5327	0.2125
	100	10	1.7	1.3080	0.1700
	120	9		1.1733	0.1417
ROCK PICKERS	60	11		2.0436	0.4167
ROCK RAKES	80	10	2.5	1.6350	0.3125
& COMBINATIONS	100	9		1.4080	0.2500
RODWEEDERS	60	17.5		1.5371	0.4167
	100	15	2.5	1.0080	0.2500
	140	13		0.7859	0.1786
ROTARY CUTTERS	50	13		2.2006	0.5000
	70	12	2.5	1.6543	0.3571
	90	11		1.3624	0.2778
SCRAPERS	60	11		2.0436	0.4167
	80	10	2.5	1.6350	0.3125
	100	9		1.4080	0.2500
SNOW BLOWERS	20	18		4.5400	0.9500
	40	15	1.9	2.5200	0.4750
	100	10		1.3080	0.1900
SPRAYERS, PTO	30	17.5		3.0743	1.0333
SPRAYERS, TRUCK MOUNT	60	14	3.1	1.7514	0.5167
	120	10.5		1.0543	0.2583

APPENDIX F

Machinery Cost Calculation Guide

MACHINE	A ANNUAL USE HRS	B DEP'N LIFE YRS	C AVERAGE ANNUAL REPAIR RATE % ORIG. CASH COST	D FIXED COST/ HOUR/ $1000 ORIG. CASH COST	E REPAIR COST/ HOUR/ $1000 ORIG. CASH COST
SPRAYERS SP	200	12		0.5790	0.1750
HIGH CLEARANCE	300	11		0.4087	0.1167
	400	10	3.5	0.3270	0.0875
	500	9		0.2816	0.0700
	600	8		0.2555	0.0583
SWATHERS, PTO	60	17.5		1.5371	0.4833
	100	15	2.9	1.0080	0.2900
	140	13		0.7859	0.2071
SWATHERS, SP	60	17.5		1.5371	0.3667
	100	15	2.2	1.0080	0.2200
	140	13		0.7859	0.1571
SWATH ROLLERS	60	17.5		1.5371	0.2500
	100	15	1.5	1.0080	0.1500
	140	13		0.7859	0.1071
TRACTORS, 2WD	200	20		0.4290	0.1550
	300	16.5		0.3178	0.1033
	400	14.5		0.2572	0.0775
	600	13.0	3.1	0.1834	0.0517
	800	11.5		0.1488	0.0388
TRACTORS, 4WD	200	20		0.4290	0.1300
	300	16.5		0.3178	0.0867
	400	14.5		0.2572	0.0650
	600	13.0	2.6	0.1834	0.0433
	800	11.5		0.1488	0.0325
TRAILERS, LIVESTOCK	100	13.5		1.0747	0.2000
	150	12	2	0.7720	0.1333
	200	11		0.6131	0.1000
TRUCKS, GRAIN	100	13.5		1.0747	0.2500
	150	12	2.5	0.7720	0.1667
	200	11		0.6131	0.1250
TRUCKS, PICKUP	200	10.5		0.6326	0.1550
	250	10	3.1	0.5232	0.1240
	300	9.5		0.4518	0.1033
TUB GRINDERS	100	12		1.1580	0.3200
VERTICAL FEED MIXERS	200	10	3.2	0.6540	0.1600
	300	8.5		0.4889	0.1067

APPENDIX G

Rental of Farm Buildings

You need to consider the following:	Your farm	Example
• Replacement cost of buildings	_____	$20,000
• Salvage value of buildings	_____	$8,000
• Investment rate of return	_____	5%
• Repair rate (% of replacement cost)*	_____	

Calculations:

A. Return on Investment:

$$\frac{\text{(Replacement cost)+(Salvage value)}}{2} \times \text{(investment rate)} =$$ _____

B. Depreciation:

$$\frac{\text{(Replacement cost)-(Salvage value)}}{\text{Years of service}} =$$ _____

C. Insurance:

Annual insurance premiums = _____

D. Repairs:

Annual repair cost* = _____

TOTAL _____

Example Calculation:

A: $\frac{(\$20{,}000 + \$8{,}000)}{2} \times (5\%) =$	$700
B: $\frac{(\$20{,}000 - \$8{,}000)}{30} =$	$400
C: Annual premium =	$60
D: $20,000 x 0.005 =	$100
TOTAL =	$1,260**

* repair rates are hard to estimate; steel buildings (bins and quonsets) might be 0.5% of replacement cost per year, aeration fans might be higher, wood buildings might be 1% to 3% of replacement cost.

** divide by number of bushels of storage to get a cost per bushel

APPENDIX H

Factors to Consider When Custom Hiring

Custom hiring is a business arrangement. The terms of the arrangement should be written in a formal agreement. If unwritten, the terms are more likely to be misunderstood in case of a dispute. The following should be considered in a custom hiring agreement.

Timeliness

Significant losses can occur if an operation is not started or completed on time. To facilitate planning, a custom hiring agreement should include a schedule of operations for both parties. For example, when the custom combiner is picking up swathed grain, the schedule would outline time periods for swathing by the owner and combining by the custom operator. Such a schedule would be subject to weather conditions and crop maturity.

Operations

The parties should write into the agreement the exact operations to be performed by each party and the machine, materials and labour to be supplied by each.

Rate Schedule

The custom operator should stipulate the rate for each operation to be performed on the basis of acreage, time (hour, day, week) or total operation performed.

Management

A custom hiring agreement should ensure that the custom operator will employ acceptable management practices in his operations.

Terms of Payment

A custom hiring agreement should stipulate terms of payment for custom operations. As well, the custom operator should bill the client upon the completion of each custom operation. The bill should indicate actual units (hours, acres, etc.) completed, the rate charged per unit, the total charge and the date payment is due.

Termination

A minimum period for notice of termination should be included in a custom hiring agreement. A penalty should be stipulated for unjustified termination within the term of the agreement.

Insurance

A custom operator may be considered differently than a farmer when insuring. It is advised that this point be clarified with the insurance company if one considers doing custom work or renting equipment.

Sample Custom Farming Agreement

Date:_____

Section A

_____, hereinafter referred to as the "custom operator", agrees to conduct the following types of machine operations on the described farm land of _____ hereinafter referred to as the "owner", located at _____ Saskatchewan, for the year 20_____.

Description of Machine Operation	Legal Location	Acres	Fee Per Acre

Note: Be specific about what each machine operation includes (i.e. harvesting - does it include swathing, combining with pickup and hauling the grain to the storage facility, or straight cutting the crop and hauling the grain to the storage facility?)

Section B

The custom operator agrees to complete the said machine operations according to the following schedule:

Machine Operations	Commencement Date	Completion Date

Section C

If during the term hereof, any of the goods and chattels of the custom operator are seized by any creditor, this agreement is forfeited and void.

The term owner and custom operator shall include the executors, administrators and assigns of the owner and custom operator, respectively.

Payment is due upon completion of said machine operations. Overdue accounts past 30 days subject to a 2% per month interest charge.

_____ _____

Witness Custom Operator

_____ _____

Witness Owner